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# Wages in Great Britain, France and Germany

*Research Report Number 40*  
*August, 1921*

National Industrial Conference Board

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WAGES IN GREAT BRITAIN, FRANCE  
AND GERMANY

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RESEARCH REPORT NUMBER 40

AUGUST, 1921

National Industrial Conference Board

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## Foreword

It is felt that a report on wages in Great Britain, France, and Germany is of especially timely interest in view of the tariff revisions now under consideration by Congress. Such a report should be of value to American industry as well as to governmental bodies in estimating the extent to which the American manufacturers is handicapped by the lower costs in these foreign industrial countries. While wages are, of course, only one element of the total manufacturing cost to be taken into consideration, they are of such importance as to make a separate study of them definitely worth while regardless of the situation in respect to the other elements of cost.

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# Wages in Great Britain, France and Germany

## INTRODUCTION

This report is a compilation from available sources of wage data in Great Britain, France and Germany. The industries covered by the report are: building; mining; metal; textile; clothing; leather; sand, clay and glass; chemical; papers, printing and bookbinding; woodworking; and baking and confectionery. These industries together employ the greater part of the industrial wage-earners in the countries named.

In general, the period covered by the report is from April, 1920, to April, 1921. Much of the wage data were taken from collective agreements which were entered upon during the early part of 1920, and are therefore recognized as of that date, although rates fixed in these agreements were effective until much later. In all cases where it was found that the early agreements had been replaced, the latest available figures were used.

Cost of living figures have also been given in connection with wages for the three countries studied, in the first place to aid in estimating the purchasing power of the wages, and secondly, because the cost of living has been used to a very large extent in these countries in the adjustment of wages.

The main sources of the data used are (1) the reports, published and unpublished, of United States official representatives in Great Britain, France and Germany; (2) the official publications of the various countries; and (3) the bulletins of the International Labor Office. For France and Germany translations have been made direct from the official publications. In all cases the sources of the data used are given.

The wage figures are presented in foreign money and in American dollars. The conversion to dollars has been made at par of exchange, and also on the basis of the average rate

of exchange from April, 1920 to April, 1921.<sup>1</sup> The latter conversion rate was chosen because it represents approximately the period covered by the wage data, and because in the case of each country it affords a rough idea of present exchange values.

#### CHARACTER OF MATERIAL

The data presented are taken by the Board as fairly representative of the wage situation in these three countries for the period covered. Certain outstanding characteristics of the material from the different sources, however, should be noted:

1. The data are of different dates, varying from early in 1920 to the spring of 1921. Most of the official figures from any country, especially if in the form of a general average, are of an early date. An example of this is the survey of wages in German industries made by the German Federal Statistical Office in February, 1920. Such figures are valuable for comparative purposes, but in so using them the change since that time should be taken into account.

Other wage figures given for the first part of 1920 are those contained in collective agreements of that period. In many cases, such agreements were to be in effect definitely until the end of 1920. In other cases no specific statement of duration was given, but in the absence of superseding agreements these rates were included, as being in effect probably until a considerably later time than the date of the agreement. In the use of these figures, also, allowance must be made for the time element.

Other data, of the summer and early fall of 1920, have been included for comparative purposes.

The end of 1920 probably marks the peak of wages in Great Britain and France. Between January and April of 1921 wage reductions amounting to approximately 15% to 20% occurred in a large number of the industries in these countries. In Germany, however, there had been no decrease in wages during the first months of 1921.

<sup>1</sup>Par of exchange: pounds, \$4.8665; shillings, \$.2433; pence, \$.0203; francs, \$.193; marks, \$.2383.

Average rate of exchange for the period April 1, 1920 to April 1, 1921, computed from weekly quotations: pounds, \$3.7457; shillings, \$.18728; pence, \$.0156; francs, \$.0693; marks, \$.01878.

2. In certain instances the wage data are presented in the form of averages for whole industries within a country. These averages may be official government figures or they may be representative figures obtained by United States Consuls from unofficial sources, such as trade associations, labor unions, or individuals. Whenever possible the original source has been noted, so that the figures may be evaluated according to their source.

3. For the most part the data in the report are in the form of rates for single industries in particular localities, because the latest information for the various countries is contained in the reports of collective agreements between local associations of employers and employees. Since in the three countries studied, especially in certain industries, there is a recognized system of adjusting wages in the various classes of localities, according to the relative cost of living, wage rates for different places often vary widely. In an attempt to make the data in this report as representative as possible, figures from all classes of localities have been included.

4. The tables of wages and wage rates have been condensed as much as was feasible. Wherever possible the figures for separate occupational groups have been kept distinct and the various degrees of skill differentiated. In many cases, however, the figures for different age groups or for different classes of localities have been thrown together and only the lowest and highest figures reported. Children's wages have in most cases been omitted.

5. In all the data presented an effort has been made to distinguish between actual wages and wage rates. Actual wages or earnings show the average amount actually paid to the worker per hour, day, week or month, as the case may be. The wage rates, on the other hand, show only the amount to be paid, usually in accordance with an agreement. The rates may be either minimum rates, or definite rates set for certain classes of workers, designated according to occupation, degree of skill, age or sex.

6. Hourly, daily, weekly, and monthly wage figures are included in the report, inasmuch as it was impossible to reduce all the data to the same time-units because of lack of information as to hours worked, etc. An effort has been made, however, to keep the data within tables on the same basis, and occasionally

this has required the computation of hourly rates from daily rates, or vice versa.

7. Bonuses have been included, wherever possible, in the wage figures presented.

In the use of these wage figures there will probably be a temptation to make direct comparison with wages in the United States, and to draw from them conclusions regarding the relative cost of production in the different countries. Such comparisons and conclusions must be made with great caution, recognizing the qualifications of the material as stated above. It should also be recognized that wages are but one element in the total cost of production, and that the importance of this element varies, not only between industries in different countries, but between establishments in the same country, because differences in production methods, equipment, and character and capacity of the workers make for different degrees of productivity per worker.

A summary of the general wage situation in Great Britain, France and Germany is given in the following section. The body of the material, however, is arranged by industries, with the wage data for Great Britain, France and Germany grouped together for each industry.

## I

### GENERAL WAGE SITUATION IN GREAT BRITAIN, FRANCE AND GERMANY

Percentage increases over 1914 wages in the three countries studied varied widely among different grades of workmen. The more highly paid workmen received a relatively small increase, while the lower paid workers received a relatively large increase. This was due to the fact that money increases to cover the increased cost of living were practically the same for all classes of workmen, and the relative increase, therefore, was disproportionate. In Germany, especially, there has been a tendency for the wages of unskilled workers to approach those of skilled workmen; the former must have a subsistence wage, and employers have been able to pay but little more than this minimum to skilled workers.

The purchasing power of the wages of workmen in the various countries is difficult to estimate. In Great Britain it is very probable that wages have in general followed retail prices so closely that there is little difference in the purchasing power of those wages now as compared with 1914. Especially is this true in those industries where the cost of living figure is used as a basis for determining wages. Figures reported by the United States Trade Commissioner indicate that the cost of living in France had increased more than 300% by the end of 1920, and that wages were lagging behind. Since no official data for France as a whole are available, however, there are no means of judging to what extent this figure is representative. For Germany, also, no comprehensive figures for the whole country are to be had. It is estimated, however, that the cost of living there has gone up to a greater extent than have wages. A male adult worker in Berlin in November, 1920, is estimated to have received an increase over 1913 in average weekly wages of 700%, while the cost of living in Berlin during the same period had increased 1100%. The peak of prices was reached in all three coun-



tries at the end of 1920. In Great Britain and France this resulted in substantial reductions in wages in most of the industries during the first months of 1921, but in Germany there was no evidence in the wage agreements of reductions in wages, possibly because, even with the decrease in prices, the cost of living was still above wage levels.

There has been extensive use of the cost of living as a basis for wage determination in all three countries. In Great Britain wages in a number of industries are regularly adjusted in accordance with the official cost of living figure published by the Ministry of Labour. In France investigations of changes in cost of living conducted by local commissions and also by associations of manufacturers have been used quite extensively as a basis in the settlement of wage disputes. In Germany, also, the cost of living, especially as it varies between localities, is definitely recognized in adjusting wages. Experience with such a system of wage adjustment, however, has shown that any lowering of wages due to a fall in prices meets with resistance from the wage earners, and that the validity of cost of living figures used is questioned. In Great Britain, for instance, a Parliamentary Committee was formed to make an investigation of cost of living, and arrived at a figure which, in September, 1920, was 189% above July, 1914, as contrasted with the 161% increase shown by the cost of living index of the Ministry of Labour, which has been used as the basis for determination of wages in a large number of industries.

Various methods of adjusting wages are in operation. In Great Britain, beside the adjustments made in accordance with the official cost of living figure, wages are determined by sliding scales based on the selling price of the commodity, by variations in output of the product, and by negotiations between employers' associations and trade unions. In France, as far as can be determined, most of the wage settlements are negotiated between the employers' associations and unions, or between individual employers and their employees. Cost of living figures are largely used in arriving at such settlements, as has been indicated, and in certain instances the wage rates are adjusted periodically in accordance with these figures. In Germany collective bargaining has become the principal means of setting wages, with a system of central wage boards for the



arbitration of disputes. Agreements in an industry are often made to cover the whole country, but in the wage rates for different "grades" of localities such agreements allow for the varying cost of living in these localities.

Premium bonuses and war bonuses, in addition to the regular wage, are extensively used. In Great Britain they were originally introduced as a war measure to increase production, and still are employed in certain industries, though retained now rather to relieve the cost of living situation than to stimulate production. In both France and Germany provisions for cost of living bonuses and family allowances to married workers with children are a regular feature of wage agreements.


A compilation of material on the general wage situation in each of the three countries is given in the following sections.

### **Great Britain**

According to a summary in the February, 1921, issue of the British *Labour Gazette*, percentage increases over 1914 rates of wages in Great Britain show a wide diversity among different classes of workers. In some cases, especially among the more highly paid workmen, increases up to the end of 1920 amounted to not more than 120 or 130%. On the other hand, among the lower paid grades of workmen in the same industries, the advances were equivalent to 200% or more, and there were some exceptional instances of increase of over 300%. It is estimated that the average increase in full time weekly rates of adult workers was equivalent to from 170 to 180%. As the length of the nominal work week had been considerably reduced in the same period—the usual range at the end of 1920 being about 44 to 48 hours weekly as compared with 48 to 60 hours before the war—the percentage increase in hourly rates was substantially greater.

In a number of industries agreements have been made by employers' associations and trade unions concerned, providing for the regular and automatic adjustment of wage rates in accordance with variations in the cost of living. The general principle of all these agreements is that a given amount of rise or fall in the cost of living shall be followed by a definite amount of increase or decrease in wage rates. In nearly all

cases, the figure for the cost of living published by the Ministry of Labour is used. Under some of the agreements the increases or decreases take the form of flat-rate money amounts; in other cases the change in wages takes the form of a percentage addition to the standard or basic rates, yielding varying money amounts for different classes of workmen. Such agreements are in effect in the following industries:



- Railway service
- Wool textile industry (Yorkshire)
- Enginemmen, firemen, etc., in the wool textile industry
- Flannel weaving (Wales)
- Bleaching, dyeing, printing and finishing
- Machine calico printing
- Engravers to calico printers
- Lambswool spinning (Leicester)
- Packers, makers-up, etc. (Manchester)
- Carpet manufacture
- Silk manufacture (Leek and Brighouse)
- Linen manufacture (Kirkcaldy)
- Asbestos manufacture
- Silver and allied trades (London)
- Military musical instrument making (London)
- Bedstead making
- Government employees
- Police service
- Municipal service
- Wallpaper manufacture
- Dyeing and cleaning
- Gypsum mining (Nottinghamshire and Derbyshire)
- Skip and basket manufacture (Yorkshire)

According to the official cost of living figure published in the *Labour Gazette*, the peak of commodity prices was reached in November, 1920, when the increase over July, 1914 was 176%. After that time it steadily declined, and April 30, 1921 stood at 128% above the 1914 figure.

The year 1920 was one of unprecedented advance in hourly wage rates. Owing to the serious decline in employment in the closing months of the year, however, actual weekly earnings in many industries were considerably lower at the end of 1920 than at the beginning of the year.<sup>1</sup>

On the other hand, reductions in wages affecting 2,556,000 workers occurred between January and April, 1921. These reductions fall into the following four categories:

(1) Reductions in wages of coal miners in accordance with variations in the output of coal. About 1,200,000 miners were affected.

<sup>1</sup>A report has just been issued by the British Ministry of Labour giving in detail an account of the wage situation in that country as of December 31, 1920, for various occupational groups and localities. See Great Britain. Ministry of Labour. "Standard Time Rates of Wages and Hours of Labour," 1921.

(2) Reductions brought about under agreements by which wages vary in accordance with the Ministry of Labour cost of living index figure. The chief reductions under this head were in the railway service, wool manufacturing, textile dyeing and finishing, and hosiery manufacture. About 900,000 workers were concerned in these wage adjustments.

(3) Reductions made in accordance with sliding scales based on the selling price of the commodity. The chief example is the iron and steel industry, in which reductions took place varying from 26½ to 69% on standard rates, equivalent to from 7½ to 21% on current earnings, about 110,000 workers being affected.

(4) Agreements resulting from negotiations between employers' associations and trade unions, covering about 300,000 workers.<sup>1</sup>

## France

The following comment on the general wage situation in France is taken from a report of the United States Commercial Attaché, Paris, February 4, 1921:

According to information received from the Office des Statistiques Générales de la France, Ministry of Labor, there are no official statistics available as to the salaries paid in any line of French industry. Most of this information appears in trade and financial journals. According to this office, when the eight-hour day went into effect in the second half of 1919, the employers entered into agreements or contracts with the employees as to the rate of wages to be paid, and it is not believed that the salaries stipulated therein have changed much since that time. However, the employers generally refuse to divulge the rates of salaries which they pay their workers. Exact figures, according to Monsieur Laurent, Secretary of the Confédération Générale du Travail, are almost impossible to obtain since the industrial crisis set in some three months ago. Voluntary reductions have often taken place where employers have threatened to close down their factories. Strikes have often been successful in creating wage increases, all of which has tended to create variations in the prices paid in the same industry. The Secretary stated, however, that the wages paid in the Provinces are approximately 20% less than those paid in the Paris region.

In a general way, the tendency in French industries has been to maintain without modification the basic pre-war wage rates, and to make necessary increases in the form of bonuses for the high cost of living, premium bonuses, etc.<sup>2</sup>

The amount of such bonuses or premiums are fixed, along with wages and other conditions of labor, by collective agreements between employers and employees. In almost all cases, extra provision, in the form of a family allowance, is made for married workers with children.

A report of the National Industrial Conference Board,<sup>3</sup> pub-

<sup>1</sup>Great Britain. Ministry of Labour. *Labour Gazette*, May, 1921, p. 256.

<sup>2</sup>United States Trade Commissioner, Paris, November 6, 1920; United States Bureau of Foreign and Domestic Commerce. *Commerce Reports*, January 21, 1921.

<sup>3</sup>Report of the European Commission of the National Industrial Conference Board. Problems of Labor and Industry in Great Britain, France and Germany, p. 30.

lished in 1919, has the following to say on wage payment in France:

In France there was a war bonus system whereby a graduated sum was added to the wage on account of the high cost of living (*Primes cherté de vie*). It was so arranged that a workman drawing but 7.70 francs per day, the minimum, would receive 3 francs additional, and a woman worker drawing 6 francs per day, the minimum, would receive 2 francs additional. As the wage increased in both cases the additional amount decreased, so that a workman drawing 17 francs per day would get nothing additional, and a woman worker drawing 14 francs would get nothing additional. The basic rates were set by Rate Fixing Committees in each political district.

The Committee consisted of five workers (two women) and five employers, nominated by the respective local *syndicats* and appointed by the Minister of Munitions. The rates set by these committees are minimum rates; good workmen get more and sometimes much more. The same rates applied to these same classes of labor throughout the district.

A report of the United States Trade Commissioner in Paris, dated November 6, 1920, states:

At the beginning of the year 1920 the increase in wages, as compared with 1913, was roughly proportionate to the increase in the cost of living, that is, approximately 300%. According to figures emanating from a reliable source, the increase in the cost of living from 1914 up to date (November 6, 1920) is approximately 373%. Workers' wages, in general, have not caught up with the increase in cost of living since the beginning of the year.

Figures presented by the French coal miners indicate that on November 1, 1920, the necessary weekly expenditure of a miner and his wife had increased 356% from before the war and that wage increases were only about 270%. Since no official cost-of-living figures for France as a whole have been published, however, it is impossible to state how accurately these figures represent the general situation.

In a number of French provinces special commissions have been created to study increases in the cost of living and to suggest methods of combatting such increases. These commissions also act in some measure as arbitrators in connection with demands for higher wages.

A number of French industries have endeavored to avoid labor conflicts by instituting committees charged with maintaining an equitable balance between wages and the cost of living. Both workers and employers are represented on these committees. Increases or decreases in the cost of living are reported at stated periods, usually every three months, and serve as a basis for increases or decreases in salaries.<sup>1</sup>

Funds for family allowances have been established by employers in several districts in France, e. g., Lorient, Grenoble, St. Dizier, Nantes, Paris, Lyons and Dijon. On September 1, 1920 there were 35 such funds, of which 18 were confined

<sup>1</sup>France. Ministry of Labor. *Bulletin du Ministère du Travail*, January-March, 1921.

to single trades. In Grenoble the fund belongs to the Association of Employers in the Metal Trades, and at St. Dizier to the Metal Trades Association of Champagne. Allowances from these funds are granted for children under 14 years of age and (except at Paris, Grenoble and St. Dizier) for invalid persons over 16 years of age and orphans under 14 years of age.<sup>1</sup>

## Germany

In the matter of salaries and wages in Germany a vast system of schedules has been built up since the Revolution and is now being perfected and adjusted to existing conditions. The tendency has latterly been to fix the schedules centrally and to make them applicable to the whole country, at the same time giving them sufficient elasticity to make them adaptable to local requirements. This is done by means of so-called "frame" schedules in which only the principles are embodied, the details being filled in locally. The schedules have also been made adaptable to the constantly changing cost of living by making clauses referring to wages valid for only short periods of time. The number of those who work on a schedule basis is continually increasing.<sup>2</sup>

In February, 1920, the first official general wage inquiry took place. As yet, however, no satisfactory cost of living figures for Germany as a whole are available. According to Dr. Kuczynski, of Berlin-Schöneberg, the wages of the average male worker in Berlin are estimated to have increased about 700% from 1913-14 up to November, 1920, while the cost of providing for a "minimum of existence" has increased about 1100%.<sup>3</sup>

AVERAGE WEEKLY EARNINGS OF A MALE ADULT IN BERLIN,  
1913 TO 1920

Period	Marks	Dollars	
		Par of exchange	Exchange 1920-21
August, 1913 to July, 1914.....	35	8.34	.657
August, 1919 .....	100	23.83	1.878
February, 1920 .....	170	40.51	3.193
November, 1920 .....	240	57.19	4.507

<sup>1</sup>*Labour Overseas*, October-December, 1920, p. 48.

<sup>2</sup>Germany. Reichsarbeits-Ministerium. *Reichs-Arbeitsblatt*, November 15, 1920. p. 104\*.

<sup>3</sup>International Labor Office. *Daily Intelligence*, January 11, 1921, p. 5.



The above figures, which indicate an increase of approximately 390% to February, 1920<sup>1</sup>, are substantiated by the 1919 annual reports of the government factory inspectors, which show that by the end of that year an average increase of 300 to 450% over pre-war wages had taken place, and that wage increases were highest in the great industrial centers, especially Berlin. This report further states that the wages of women were generally about 25% to 35% lower than those of men, and that the rise in wages corresponded approximately to the general rise in food prices, but was far below the rise in prices of clothing and boot and shoes.<sup>2</sup>

There has been, in general, a tendency to approximation between the wages of skilled and of unskilled workers. It is stated that because of this situation a dearth of apprentices exists. Unskilled municipal workers at Berlin and Leipzig received about 90% of the rate for skilled workers in 1920; the former must have a subsistence wage, and employers could afford to pay but little more to the latter.<sup>3</sup> In Altona the difference between the weekly wages of the most highly qualified engineer and that of the lowest laborer at the end of 1920 was only 13.60 marks (par, \$3.24; exchange 1920-21, \$.255).<sup>4</sup>

The first official general wage investigation was begun by the Federal Statistical Office in February, 1920. It was proposed to bring the entire field of industry within the scope of these inquiries, and to make them a permanent feature of the work of that office.

The *Monthly Labor Review* of the United States Department of Labor, in publishing a compilation of wage awards in Germany in 1919, states:

Collective Bargaining is becoming more and more popular among employers and workers in Germany, especially in the large industries. . . . Most of the agreements concluded are for very short terms, or if for a longer term, contain a clause permitting a revision of the wage rates in case of a further rise in the cost of living. . . . A majority of the agreements indicate a tendency in favor of resumption and continuation of piecework. In agreements providing for piecework, pieceworkers are as a rule guaranteed the minimum time rates, and in some instances a certain percentage above the minimum time rates.

<sup>1</sup>*Labour Overseas*, October-December, 1920, p. 51.

<sup>2</sup>*Soziale Praxis*, November 10, 1920. Quoted in *Labour Overseas*, October-December, 1920, p. 51.

<sup>3</sup>*Labour Overseas*, April-June, 1920, p. 14.

<sup>4</sup>*Idem.*, October-December, 1920, p. 51.

*Soziale Praxis* (September 15, 1920) states that employers are becoming more favorable to a wage scale that varies with the cost of living. Practical experience shows, however, that in almost all cases where a sliding scale has been introduced, a fall in index numbers of prices has not led to a proportional decrease in wages. In Alsace, the employees of German newspapers appealed in July, 1920, to the Conciliation Committee against the employers, who wished to reduce salaries on account of a fall of 11 points in the index number. The committee upheld the appeal because of the advance in prices of items not included in the index number, (fares, taxes, insurance contributions, etc.) At Kiel, in June, 1920, a rise in bonus of 10 per cent. was given on the strength of a provisional index figure. The final figure showed an increase of only 2 per cent., but the workers refused to give up the increased bonus. In July, the Arbitration Award decreed the continuance of the June increase, although the index figure showed a decline. In August, the Trades Council, by means of a transport workers' strike, compelled the increase to be paid for August. The same thing happened at Breslau.<sup>1</sup>

Provisions for holidays, and family allowances for wife and children to married men, are features of most collective agreements.<sup>2</sup>

<sup>1</sup>*Idem.*, p. 47.

<sup>2</sup>*Labour Overseas*, July-September, 1920, p. 12.

## II

### BUILDING TRADES

#### Great Britain

The wage figures given in this section for the British building trades are the official average figures for the end of 1920.

In the building trades in Great Britain the system of area grading, whereby uniform rates of wages were agreed upon for towns of certain grades in various districts, was adopted in some districts in 1919, and by the end of 1920 was in operation in practically all districts outside London. The arrangements made under this system during 1920 resulted in the establishment of uniform rates of wages for skilled men in the larger towns for the whole of the Northern Counties, Yorkshire, Lancashire, the Midlands, the Southwestern Counties, South Wales, and Scotland, while lower uniform rates were made applicable to the larger towns in the remaining districts.<sup>1</sup>

The increases over 1914 wages in the building trades vary considerably in different districts. Increases in hourly rates include advances granted in many cases concurrently with reductions in weekly hours of labor to maintain weekly wages at the former level. For the principal classes of workmen in towns of over 100,000 population, the average percentage increases in hourly and weekly rates up to the end of 1920 were as shown in the following table:

	Percentage increase over 1914 rates	
	Hourly	Weekly
Bricklayers .....	178	148
Masons .....	181	154
Carpenters and joiners.....	182	152
Plumbers .....	189	156
Plasterers .....	182	151
Painters .....	208	174
Laborers .....	265	224

<sup>1</sup>*Labour Gazette*, January, 1921, p. 4.



If the increases shown above are combined according to the relative numbers of men employed in the different occupations, the resulting general average increase in hourly rates was about 225%, and in weekly wages (taking into account the effect of the reductions in working time) about 190%. There was little difference in the amount of increase for different classes of men, but owing to the difference in their pre-war rates, the percentages of increase are much greater for laborers than for skilled men, the average increase in weekly wages being equivalent to 224% for laborers, compared with 174% for painters, and with 148% to 156% for other classes of skilled labor.<sup>1</sup>

The unweighted averages of hourly rates of wages in towns over 100,000, for these same occupations on December 31, 1920, were as follows:

AVERAGE HOURLY WAGE RATES FOR VARIOUS OCCUPATIONS IN  
BUILDING TRADES, DECEMBER 31, 1920

	Pence	Dollars	
		Par of exchange	Exchange 1920-21
Bricklayers .....	27.5	.558	.430
Masons .....	27.5	.558	.430
Carpenters and joiners.....	27.4	.556	.428
Plumbers .....	27.8	.564	.434
Plasterers .....	27.5	.558	.430
Painters .....	27.1	.550	.424
Laborers .....	23.8	.483	.372

No decreases in wage rates in these occupations had been reported up to May, 1921.

For men employed on civil engineering construction work, two decreases in wage rates were reported during April, 1921, as the result of an agreement concluded by the Civil Engineering Construction Conciliation Board for Great Britain. Current hourly rates for navvies and laborers were set at 1 shilling, 7 pence to 1 shilling, 9 pence (par, \$.3852 to \$.4258; exchange, 1920-21, \$.2965 to \$.3277), according to the district. Classes other than navvies and laborers were to receive the same rate as the latter, plus an amount fixed by schedule for each occupation, the excess usually varying from 1 penny

<sup>1</sup>*Labour Gazette*, May, 1921, p. 257.

to 4 pence (par, \$.02 to \$.082; exchange, 1920-21, \$.015 to \$.06) per hour.<sup>1</sup>

### France

No general official figures are available for wages in the French building trades, but from the figures from various sources presented in this section it appears that in general, in 1920, hourly wage rates of skilled workers in the building trades ranged from 2.25 to 3 francs (par, \$.434 to \$.579; exchange 1920-21, \$.156 to \$.208), except in the very small towns.

According to figures given in a report on wages in French industries by the United States Trade Commissioner in Paris, dated November 6, 1920, hourly wages in 1920 in the building trades had increased over 1913 wages, from 175% in the case of stone cutters and bricklayers to 275% in the case of handy men (construction work). Hourly wage rates in 1920 from this report are given below.<sup>2</sup>

HOURLY WAGE RATES IN SPECIFIED OCCUPATIONS IN THE BUILDING TRADES, 1920

	Francs	Dollars		Percentage increase over 1913
		Par of Exchange	Exchange 1920-21	
Stone cutters .....	2.75	.531	.191	175
Stone setters .....	2.75	.531	.191	175
Masons .....	2.75	.531	.191	189
Masons' apprentices .....	2.15	.415	.149	207
Bricklayers .....	2.75	.531	.191	175
Bricklayers' apprentices ...	2.15	.415	.149	207
Structural iron workers....	2.75	.531	.191	201
Handy men .....	2.25	.434	.156	275
Night watchmen .....	12.00 <sup>a</sup>	2.316	.832	200

<sup>a</sup>Per night.

This report continues:

The wages for plumbers, which have been effective since April, 1920, are 2.75 francs (par, \$.53; exchange, 1920-21, \$.191) per hour, and 2 francs (par, \$.39; exchange, 1920-21, \$.139) for plumbers' apprentices over 18 years of age. Painters are paid 2.50 francs (par, \$.48; exchange, 1920-21, \$.173) per hour, plus 2 francs (par, \$.39; exchange, 1920-21, \$.139) a day to cover the increase in cost of living.

The minimum hourly rate of wages in Paris, for masons, bricklayers, navvies, structural iron workers and painters, to

<sup>1</sup>*Labour Gazette*, May, 1921, p. 257.

<sup>2</sup>United States. Bureau of Foreign and Domestic Commerce. *Commerce Reports*, January 21, 1921.

be effective from October 1, 1920 was 3 francs (par, \$.579; exchange 1920-21, \$.208). According to the source of this information, the percentage of increase of the 1920 over 1913 wages was 215% in the case of journeymen masons and bricklayers, and 275% in the case of navvies, structural iron workers and painters. In addition to the base rate, provision was made for a monthly allowance of 20 francs (par, \$3.86; exchange 1920-21, \$1.386) for each child less than 14 years of age to workers who were heads of families, or 30 francs (par, \$.579; exchange 1920-21, \$.208) if there were three children or more. These, of course, were minimum rates; the actual average daily wages of ordinary building workers were 30 francs (par, \$.579; exchange 1920-21, \$.208) or more, and skilled workers received as high as 50 francs (par, \$.965; exchange 1920-21, \$.3465) per day.<sup>1</sup>

A report in *L'Information Sociale*, May 22, 1921, states that, dating from June 15, hourly wages of masons, helpers, and laborers in Lyon, which had been 3.50, 3.00 and 2.25 francs (par, \$.675, \$.579, \$.434; exchange 1920-21, \$.243, \$.208, \$.156), would be reduced to 3.00, 2.25 and 2.00 francs (par, \$.579, \$.434, \$.390; exchange 1920-21, \$.208, \$.156, \$.139), respectively.

In the series of eighteen collective agreements, concluded in various localities, large and small, between January and June, 1920, and reported to the Ministry of Labor, hourly wage rates for various occupations in the building trades were fixed as follows:<sup>2</sup>

<sup>1</sup>Le Musée Social. *Memoires et Documents*, January 1, 1921, pp. 12 and 33.

<sup>2</sup>France. *Bulletin du Ministère du Travail*, August-October, 1920, p. 423-433.

HOURLY WAGE RATES IN THE BUILDING TRADES IN SPECIFIED  
DISTRICTS FIXED BY COLLECTIVE AGREEMENT,  
JANUARY TO JUNE, 1920

Occupation	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
<i>General Building</i>			
Marseilles .....	1.87½ to 3.00	.362 to .579	.130 to .208
Nevers .....	2.25	.434	.156
Limoges <sup>1</sup> .....	1.70 " 2.25	.328 " .434	.118 " .156
Tournon .....	1.60 " 2.25	.309 " .434	.111 " .156
Fougères <sup>1</sup> .....	1.80 " 2.00	.347 " .386	.125 " .139
Honfleur .....	1.75 " 1.80	.338 " .347	.121 " .125
<i>Masons</i>			
Rouen .....	2.75	.531	.191
St. Étienne .....	2.00 " 3.00	.386 " .579	.139 " .208
Thouars .....	1.75 " 2.00	.338 " .386	.121 " .139
Pont-Audemer ....	1.80 " 1.90	.347 " .367	.125 " .132
Draguignan <sup>2</sup> .....	1.50	.290	.104
<i>Plasterers</i>			
Rouen .....	2.75	.531	.191
St. Étienne .....	2.75	.531	.191
<i>Painters</i>			
St. Étienne .....	2.75	.531	.191
<i>Roofers</i>			
Pont-Audemer <sup>1</sup> ....	2.00	.386	.139
Fecamp .....	1.90	.367	.132
St. Étienne .....	2.25	.434	.156
<i>Excavators</i>			
Rouen .....	2.00	.386	.139
Hennebont .....	1.25 " 1.40	.241 " .270	.087 " .097
<i>Laborers</i>			
Rouen .....	1.75	.338	.121
<i>Plumbers</i>			
St. Étienne .....	2.25	.434	.156

<sup>1</sup>Minimum rates.

<sup>2</sup>Hourly rates computed from daily rates on basis of 8-hour day.

## Germany

The following tabulation of the official survey of wages in the German building trades in February, 1920, together with the other figures presented, furnish a very good basis for determining the wages at the end of 1920. The statement in the British official publication mentioned below that wages had increased 50% since the time of the official survey is borne out by the figures from other sources presented in this section.

**HOURLY WAGE RATES AND AVERAGE MONTHLY EARNINGS IN THE  
GERMAN BUILDING TRADES, FEBRUARY, 1920**

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
HOURLY RATES			
<i>Germany as a whole</i>			
Unskilled ..	1.25 to 4.39	.298 to 1.045	.023 to .082
Bricklayers and masons.	1.60 “ 4.50	.381 “ 1.071	.030 “ .085
Carpenters .	1.60 “ 4.38	.381 “ 1.042	.030 “ .082
<i>Towns with population of over 200,000</i>			
Unskilled ..	2.60 “ 4.08	.619 “ .971	.049 “ .077
Bricklayers and masons.	3.24 “ 4.22	.771 “ 1.004	.061 “ .079
Carpenters .	2.83 “ 4.34	.674 “ 1.033	.053 “ .082
AVERAGE MONTHLY EARNINGS			
<i>Germany as a whole</i>			
Unskilled .	226 “ 700	53.79 “ 166.60	4.24 “ 13.15
Bricklayers and masons.	285 “ 827	67.83 “ 196.83	5.35 “ 15.53
Carpenters .	295 “ 800	70.21 “ 190.64	5.54 “ 15.02
<i>Towns with population of over 200,000</i>			
Unskilled ..	478 “ 734	113.76 “ 174.69	8.98 “ 13.78
Bricklayers and masons.	529 “ 758	125.90 “ 180.40	9.93 “ 14.24
Carpenters .	501 “ 829	119.24 “ 197.30	9.41 “ 15.57

The official inquiry by the German Government in February, 1920, into the wages paid in the building trades covered 1,002 concerns, in which 53,975 manual workers and 3,812 non-manual workers were employed—about 9% of the total concerns on the official list of 1919, and about 30% of all persons employed. The preceding table shows the main results of the inquiry, giving the lowest and highest wage figures in the localities covered. According to *Labour Overseas*, a British official publication, however, wages had increased over these figures by about 50% up to the end of 1920.<sup>1</sup>

<sup>1</sup>*Labour Overseas*, October-December, 1920, p. 49.

The wages agreement in the building trades for Germany as a whole provides that negotiations about wages shall be by districts. Formerly, when the parties could not come to an agreement, special courts were formed, in which representatives of the workers and employers' associations came together, with a representative from a main office to conduct negotiations. In the place of these special courts district wage officers have now been established. These are to meet every two months, and consist of three persons—one chosen by the employers, one by the employees, and one representing both employers and employees. The district wage office shall attempt to bring about an agreement, and failing that, shall make a decision.<sup>1</sup>

The following wage rates in the building trades fixed by collective agreement, in effect between May, 1920, and January, 1921, were reported in the *Reichs-Arbeitsblatt*. The rates vary between localities.<sup>2</sup>

HOURLY WAGE RATES IN VARIOUS OCCUPATIONS IN THE BUILDING TRADES FIXED BY COLLECTIVE AGREEMENT BETWEEN MAY, 1920, AND JANUARY, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Masons (11 districts)....	4.30 to 6.50	1.023 to 1.547	.081 to .122
Carpenters (11 districts)..	4.30 “ 6.50	1.023 “ 1.547	.081 “ .122
Cement finishers (11 districts) .....	4.30 “ 6.50	1.023 “ 1.547	.081 “ .122
Cement workers (9 districts) .....	4.10 “ 6.25	.976 “ 1.488	.077 “ .117
Plasterers (5 districts)....	5.30 “ 6.50	1.261 “ 1.547	.099 “ .122
Underground workers (6 districts) .....	4.10 “ 5.30	.976 “ 1.261	.077 “ .099
Building helpers (11 districts) .....	4.10 “ 6.05	.976 “ 1.440	.077 “ .114
Common labor (4 districts)	4.30 “ 5.30	1.023 “ 1.261	.081 “ .099

According to the publication, *Labour Overseas*, hourly wages in the building trades in the zone occupied by British troops in Germany (Cologne district) in August, 1920, were as follows:

<sup>1</sup>Germany. *Reichs-Arbeitsblatt*, March 15, 1921, p. 420\*.

<sup>2</sup>November 1, 1920 to March 31, 1921.



	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled labor .....	6.50	1.547	.122
Unskilled labor .....	6.03	1.435	.113
Youths .....	1.68 to 4.94	.400 to 1.176	.032 to .093

An eight-hour day was reported, with 20% extra for over-time on week days and 100% on Sundays and holidays. Eight pfennigs per hour (par, \$.019; exchange 1920-21, \$.0015) additional was allowed to men living at a distance.<sup>1</sup>

This same publication, in December, 1920, reported that carpenters in the Cologne area received an increase which brought their average hourly wage up to 6.90 marks (par, \$1.642; exchange 1920-21, \$.130), and the minimum up to 6.50 marks (par, \$1.547; exchange 1920-21, \$.122). By a decision of the Arbitration Court, masons and bricklayers at the same time obtained an increase of 12%, making hourly rates 7.28 marks (par, \$1.733; exchange 1920-21, \$.137) for skilled men and 7.06 marks (par, \$1.680; exchange 1920-21, \$.33) for assistants.<sup>2</sup>

During the first week in October, 1920 the tile workers of Berlin went on strike for a time-rate of 8 marks (par, \$1.904; exchange 1920-21, \$.150) an hour and an increase of 600% on 1914 piece-rates. Both parties ultimately accepted the decision of a conciliation committee, which granted an hourly rate of 7.75 marks (par, \$1.845; exchange 1920-21, \$.146); and a 575% increment on the 1914 piece-rates.<sup>3</sup>

A strike of Berlin workers in subterranean construction began on June 28, 1920, the men demanding to be paid the same wages as other workers in the building trades. The demand was granted and work was resumed on August 11, wages being raised (as from July 1) to 6.80 marks (par, \$1.618; exchange 1920-21, \$.128) per hour.<sup>4</sup>

On August 30, 1600 Berlin pipe layers struck for an increase in wages. Negotiations for a new collective agreement had been in progress since May. On September 16 the award of a Conciliation Committee appointed by the Ministry of La-

<sup>1</sup>*Labour Overseas*, July-September, 1920, p. 135.

<sup>2</sup>*Idem.*, October-December, 1920, p. 50.

<sup>3</sup>*Idem.*, October-December, 1920, p. 86.

<sup>4</sup>*Idem.*, July-September, 1920, p. 85.

hour was accepted. The award fixed the hourly rate, inclusive of cost of living bonus, from September 1, 1920 to March 31, 1921, as follows:

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Pipe layers .....	6.25	1.488	.117
Improvers .....	6.05	1.440	.114
Learners .....	5.95	1.416	.112
Helpers .....	5.90	1.404	.111

An unauthorized strike among Berlin painters lasted from July 19 to 29, 1920, their demand being that wages should be raised from 5.50 to 6.80 marks (par, \$1.309 to \$1.618; exchange 1920-21, \$.103 to \$.128) per hour to correspond with those of masons. The dispute was referred to the Central Wages Board, which fixed an increase of .4 marks (par, \$.095; exchange 1920-21, \$.0075), as from August 9, 1920.<sup>1</sup>

As a matter of interest in this connection, it is worth noting that an analysis of the expense factors in construction in Germany showed that for a simple country house in East Prussia the costs were distributed as follows:<sup>2</sup>

Wages .....	55.09%
Raw Material .....	12.22%
Administrative Costs .....	32.69%
Total .....	100.00%

<sup>1</sup>*Labour Overseas*, July-September, 1920, p. 46.

<sup>2</sup>Germany. *Reichs-Arbeitsblatt*, April 30, 1921, p. 542.\*



### III

## MINING

### Great Britain

#### *Coal Mining*

In the coal mining industry in Great Britain, the general increase in wages between July, 1914 and the end of 1920 took the form, partly of percentage increases on base rates, varying in different coal fields from 28% to 47% over pre-war rates, partly of an increase of 20% on earnings (exclusive of these percentage advances), and partly of flat-rate additions. Increases in full-time wages represented varying percentages ranging from less than 150% in the case of some of the higher-paid workmen, up to considerably over 200% in the case of some of the lower-paid grades. The average increase is estimated to be about 185% to 190%. In January, 1921 there were two further changes (an increase followed by a decrease), which resulted in a net decrease below the level at the end of 1920.<sup>1</sup>

A return issued by the Mines Department gives statistics relating to the coal mining industry in February, 1921. In a statement of average cost of production, wages were given at 29 shillings, 3¾ pence per ton (par, \$7.14; exchange 1920-21, \$5.498), as contrasted with total cost per ton of 38 shillings, 11½ pence (par, \$9.49; exchange 1920-21, \$7.307). The average monthly earnings per person employed were 18 pounds 4 shillings, 8 pence (par, \$88.73; exchange 1920-21, \$68.32), the figures varying, according to the district, from 16 pounds, 6 shillings, 3 pence (par, \$79.38; exchange 1920-21, \$61.12) in Northumberland, to 20 pounds, 17 shillings (par, \$101.47; exchange 1920-21, \$78.13) in Scotland. In seven "districts" out of the ten into which the country is divided for the purposes of these statistics, the average monthly earnings were over 17 pounds, 10 shillings (par, \$85.16; exchange 1920-21, \$65.57),

<sup>1</sup>Great Britain. Ministry of Labour. *Labour Gazette*, February, 1921, pp. 62, 3.

but under 19 pounds (par, \$92.46; exchange 1920-21, \$71.19). The corresponding figures for January 1921, and for specified periods in 1920 are as follows:<sup>1</sup>

AVERAGE MONTHLY EARNINGS OF WORKERS IN COAL MINES  
1920 AND 1921

	Pounds, Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
April-June, 1920 .....	18 6 7	89.20	68.68
October-December, 1920.....	17 19 4	87.43	67.30
January, 1921 .....	22 1 9	107.49	82.77
February, 1921 .....	18 4 8	88.73	68.32

*Other Mining and Quarrying*

For certain of the groups of miners (other than coal miners) and quarrymen, percentage increases over pre-war wages, up to the end of 1920 seem to have been greater than that quoted above for coal miners, though the actual increase in money wages may not have been so great. The increases for other groups of miners and quarriers, however, were less than those granted the coal miners.

The following data on wage rates for other mining groups have been taken from the detailed tables of wage changes pub-

WAGE RATES IN MINING (OTHER THAN COAL MINING) AND  
QUARRYING INDUSTRIES IN SPECIFIED DISTRICTS, MARCH, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Iron Mining</i>			
Cumberland (rate per shift).....	23 10	5.80	4.47
Furness district (rate per day)....	16 6	4.02	3.10
<i>Gypsum Mining (rate per week)</i>			
Gotham and Thrumpton			
Miners, Mill-hands, Stone dressers	61 7½	14.99	11.54
Cropwell, Bishop			
Dayworkers .....	57 9	16.06	12.37
<i>Limestone Quarrying (rate per shift)</i>			
W. Cumberland			
Knobblers .....	18 11½	4.61	3.55
Haulage enginemen .....	18 1½	4.41	3.40
Blacksmiths and joiners .....	17 4½	4.23	3.26
1st class day-borers .....	18 5½	4.49	3.46
1st class day-laborers .....	17 9½	4.33	3.33
Ruddmen .....	17 3½	4.21	3.24

<sup>1</sup>Labour Gazette, April, 1921, p. 177.

lished in the *Labour Gazette*. It will be noted that the wage rates are not on the same time basis, and that they vary considerably in the different districts. In the preceding table all rates are decreases under those in effect at the end of 1920.

The following hourly wage rates for other groups of miners and quarriers in effect at the end of 1920 are reported in the *Labour Gazette* of December, 1920. Up to April, 1921 no decreases had been reported for these groups.

HOURLY WAGE RATES IN MINING (OTHER THAN COAL MINING)  
AND QUARRYING INDUSTRIES IN SPECIFIED LOCALITIES,  
DECEMBER, 1920

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Freestone, Gritstone and Sandstone Quarrying, West Lancashire</i>			
Masons .....	2 0	.487	.375
Rock getters .....	1 11	.466	.359
Cutters and machine men .....	1 10	.446	.343
Skilled laborers .....	1 8	.406	.313
Unskilled laborers ...	1 7	.385	.296
<i>Freestone Quarry, North- umberland and Durham</i>			
Quarrymen .....	2 2	.527	.406
Laborers .....	1 8	.406	.313
<i>Granite Quarrying, Corn- wall</i>			
Masons .....	1 10½	.456	.351
Laborers .....	1 4	.324	.249
<i>Roadstone Quarrying, Southwest of England</i>			
Laborers <sup>1</sup> .....	1 3	.345	.266
<i>Paving Cutters,<sup>2</sup> South Wales and Monmouth- shire .....</i>	2 3	.548	.422

<sup>1</sup>Minimum rates.

<sup>2</sup>Timeworkers.

## France

### *Coal Mining*

In the Bulletin of the Ministry of Labor of France are published figures showing that up to January 1, 1920 the wages of coal miners had increased 182% as compared with wages in 1914. Wages of all underground workers had increased approximately 192%, and the increase for surface workers was 250%. The average daily wage of underground workers on

January 1, 1920 was 17.17 francs (par, \$3.314; exchange 1920-21, \$1.19).<sup>1</sup>

In the wage negotiations between mine workers and operators in the Midlands at the end of 1920, the miners submitted to the Ministry of Labor an estimate of the necessary weekly expenditure of a miner and his wife for the period before the war and as of November 1, 1920. The respective sums were 34.30 francs and 156.30 francs (par, \$6.62 and \$30.17; exchange 1920-21, \$2.38 and \$10.832), an increase of 356%. To meet the increase of 122 francs a week, wages would have had to be advanced by 20 francs a day; the advances actually received amounted to less than 15 francs a day, approximately 270%<sup>1</sup>

The latest available figures for wages of workers in French coal mines are for the summer of 1920. Since, in the wage negotiations at the end of 1920, between the mine workers and mine owners in the north of France, it was generally agreed that wage rates should remain unaltered, it is probable that the figures given below are fairly representative of the situation at the end of the year. In June, 1920 the average daily wages of mine workers in 18 mines in various parts of France were as follows:<sup>2</sup>

AVERAGE DAILY WAGES OF FRENCH MINE WORKERS, JUNE, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Miners and timbermen..	19 to 25	3.667 to 4.825	1.317 to 1.733
Miners' helpers .....	17 " 23	3.281 " 4.439	1.178 " 1.594
Laborers in and about mines .....	16 " 20	3.088 " 3.860	1.109 " 1.386
Masons, blacksmiths, carpenters, machinists.	17 " 21	3.281 " 4.053	1.178 " 1.485

An important feature in connection with wage disputes in the coal mines in France is the fact that the principle of wage adjustments according to regions is clearly recognized by employers and workers.<sup>3</sup>

In the collective agreements for 16 localities reported for

<sup>1</sup>*Labour Overseas*, November-December, 1920, p. 47.

<sup>2</sup>*Bulletin du Ministère du Travail*, May-July, 1920, pp. 216, 217.

<sup>3</sup>Report of United States Trade Commissioner, Paris, November 6, 1920; United States. Bureau of Foreign and Domestic Commerce. *Commerce Reports*, January 21, 1921.

the first eight months of 1920 in the Bulletin of the Ministry of Labor, the lowest wage reported for underground workers, at Laval, was 10.75 francs (par, \$2.075; exchange 1920-21, \$.745) per day. It was accompanied by a monthly allowance of 3 francs (par, \$.579; exchange 1920-21, \$.208) for each child under 13 years of age. The highest wage reported for underground workers, 24.50 francs (par, \$4.729; exchange 1920-21, \$1.698) per day, with an allowance of one franc (par, \$.193; exchange 1920-21, \$.069) per day for each child under 13 years of age, was for the provinces of Nord and Pas-de-Calais. The lowest daily wage reported for surface workers, 7.60 francs (par, \$1.467; exchange 1920-21, \$.527) was in La Motte-d'Aveillans, the highest in Laval, 18.50 francs (par, \$3.571; exchange 1920-21, \$1.282), plus a monthly allowance of 3 francs (par, \$.579; exchange 1920-21, \$.208) for each child under 13 years of age. The very low wages were probably for boys and women.

The following reports of daily wages of French mine workers in three districts appear in the July-September, 1920 number of *Labour Overseas*, a British official publication:<sup>1</sup>

DAILY WAGES OF FRENCH MINE WORKERS IN THREE DISTRICTS,  
SEPTEMBER, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Haute-Saône</i>			
Underground workers			
Hewers .....	17 to 19	3.281 to 3.667	1.178 to 1.317
Assistants .....	16 " 18	3.088 " 3.474	1.109 " 1.247
Laborers .....	12 " 16.50	2.316 " 3.185	.832 " 1.143
Surface workers			
Male .....	12 " 16.50	2.316 " 3.185	.832 " 1.143
Female .....	10 " 12	1.930 " 2.316	.693 " .832
<i>Bouches-du-Rhône</i>			
Underground workers .....	18 " 20	3.474 " 3.860	1.247 " 1.386
Surface workers....	16 " 18	3.088 " 3.474	1.109 " 1.247
<i>Lorraine</i>			
Underground workers			
Hewers (piece-work) .....	20 " 24	3.860 " 4.630	1.386 " 1.663
Day workers ....	14 " 18.80	2.702 " 3.628	.970 " 1.303
Surface workers....	13.50 " 18.80	2.606 " 3.628	.936 " 1.303

<sup>1</sup>p. 42.

## Potash Mining

According to data furnished by the representative of the Alsatian Potash Sales Office in Paris, potash miners in Alsace receive from 3 francs to 3.50 francs (par, \$.579 to \$.676; exchange 1920-21, \$.208 to \$.243) per hour for an eight-hour day.<sup>1</sup>

In a collective agreement affecting workers in French potash mines, drawn up to run for one year from September 15, 1920, the following wage rates were stipulated:<sup>2</sup>

DAILY WAGE RATES FOR WORKERS IN POTASH MINES EFFECTIVE  
SEPTEMBER 15, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Miners .....	23.40 to 25.00	4.516 to 4.825	1.622 to 1.733
Miners' apprentices ..	21.06 " 22.50	4.065 " 4.343	1.459 " 1.559
Loaders .....	18.72 " 20.00	3.613 " 3.86	1.297 " 1.386
Trackmen <sup>1</sup> .....	17.52 " 18.75	3.381 " 3.619	1.214 " 1.299
Job workers			
Skilled <sup>1</sup> .....	20.80	4.014	1.441
Caretakers .....	20.60	3.976	1.428
Winchmen .....	16.80	3.242	1.164
Surface workers			
Machinists .....	20.80	4.014	1.441
Firemen <sup>1</sup> .....	20.80	4.014	1.441
Ordinary laborers <sup>2</sup>			
20 to 25 years .....	15.90	3.069	1.102
Over 25 years ....	16.80	3.242	1.164

<sup>1</sup>Over 25 years of age.

<sup>2</sup>An additional family allowance of 1 franc (par, \$.193; exchange, 1920-21, \$.0693) a day is made.

## Germany

Figures on wages of Prussian miners have been published quarterly by the Prussian Government over a period of years. This is probably the most highly paid group of workers in Germany. The average net earnings per shift of men employed in the mining industry in the various districts of Prussia during the third quarter of 1920 are shown in the following table. The increases over the second quarter of 1914 are computed from a comparison of the average earnings for 1914 and 1920. If the number of men employed in

<sup>1</sup>Report of United States Commercial Attaché, Paris, February 3, 1921.

<sup>2</sup>United States Consul, Paris, November 11, 1920.



each district be taken into consideration, the average increase for Prussia as a whole, as compared with the second quarter of 1914, is about 843% for hewers and trammers, 888% for other underground workers, and 917% for surface workers. The average increase for all men together is about 872%; that is, miners' earnings during the third quarter of 1920 were between nine and ten times as great as in the period preceding the war. The range in figures in the following table indicates a range in earnings within the various localities.<sup>1</sup>

AVERAGE NET EARNINGS PER SHIFT OF PRUSSIAN MINERS DURING  
THIRD QUARTER OF 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Hewers and Trammers</i>			
Coal .....	45.97 to 58.08	10.94 to 13.82	.863 to 1.091
Lignite .....	41.54 " 53.37	9.89 " 12.70	.780 " 1.002
Copper .....	38.06	9.058	.715
Other metalliferous ores .....	38.80 to 48.31	9.23 to 11.50	.729 to .907
Salt .....	41.85 " 42.43	9.96 " 10.10	.786 " .797
<i>Other Underground Workers</i>			
Coal .....	37.60 " 43.64	8.95 " 10.39	.706 " .820
Lignite .....	39.28 " 48.82	9.35 " 11.62	.738 " .917
Copper .....	34.23	8.147	.643
Other metalliferous ores .....	33.11 to 40.12	7.88 to 9.55	.622 to .753
Salt .....	34.95 " 38.54	8.32 " 9.17	.656 " .724
<i>Surface Workers</i>			
Coal .....	36.35 " 41.33	8.65 " 9.84	.683 " .776
Lignite .....	39.05 " 53.41	9.29 " 12.71	.733 " 1.003
Copper .....	32.68	7.778	.614
Other metalliferous ores .....	31.82 to 36.48	7.57 to 8.68	.599 to .685
Salt .....	32.96 " 33.98	7.84 " 8.09	.619 " .638

The *Reichs-Arbeitsblatt* for November 15, 1920 gives statistics of the Mine Owners' Unions in the Ruhr for April, May and June, 1920, which put the net earnings of a miner at 44.27 marks (par, \$10.54; exchange 1920-21, \$.831) per shift, of a hewer at 53.90 marks (par, \$12.83; exchange 1920-21, \$1.012). In June 4.50 marks (par, \$1.071; exchange 1920-21, \$.085) per shift were added as food allowance. These figures include allowances for children, etc.

<sup>1</sup>Translated in British *Labour Gazette*, March, 1921, p. 129. Detailed figures for third quarter 1920 in *Reichs-Arbeitsblatt*, March 31, 1921, pp. 422,\* 423.\*

The annual report of the Harpener Mining Company of Dortmund gave statistics on wages in 1914 and 1920. The figures for average wages per shift, including all bonuses and without deduction of taxes, were as follows:<sup>1</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Hewers</i>			
Average 1913 and 1914.....	6.63	1.578	.125
August, 1920 .....	65.11	15.50	1.223
<i>All Workers</i>			
Average 1913 and 1914.....	5.50	1.309	.103
August, 1920 .....	54.17	12.89	1.017

### *Lignite Mining*

*Labour Overseas* reports hourly wages of workers engaged in lignite mining in the zone occupied by British troops (Cologne district) in August, 1920, as follows:

#### HOURLY WAGES OF WORKERS IN LIGNITE MINES IN ZONE OCCUPIED BY BRITISH TROOPS, AUGUST, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled .....	5.50 to 6.30	1.309 to 1.499	.103 to .118
Semi-skilled .....	5.30 " 5.80	1.261 " 1.380	.099 " .109
Unskilled			
Men .....	4.30 " 5.40	1.023 " 1.285	.081 " .101
Women .....	3.20 " 4.10	0.762 " .976	.060 " .077
Youths .....	3.00 " 4.00	.714 " .952	.056 " .075

In addition, 3 marks (par, \$.714; exchange 1920-21, \$.056) per day were allowed for a wife and each child.<sup>2</sup>

A collective agreement in the lignite mining industry in Niederlausitz, Halle, Bitterfeld, Anhalt, Borna, Meuselwitz-Rositz and Magdeburg, effective February 1, 1921, gave the following wage rates per shift for mine workers, varying according to occupation:

<sup>1</sup>*Labour Overseas*, October-December, 1920, p. 49.

<sup>2</sup>July-September, 1920, p. 135.



	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Underground workers....	36.50 to 40.50	8.687 to 9.639	.685 to .761
Surface workers .....	36.50 " 39.50	8.687 " 9.401	.685 " .742

In addition, adult men workers received 2.50 marks (par, \$.596; exchange 1920-21, \$.047) per shift bonus, and women and youths 1.50 marks (par, \$.357; exchange 1920-21, \$.028), married workers received 4 marks (par, \$.952; exchange 1920-21, \$.075) per work-day house money, and 3 marks (par, \$.714; exchange 1920-21, \$.056) for each child under 15 years of age.<sup>1</sup>

### *Metal Mining*

In an agreement in the metal mining industry in Beusberg, effective November 1, 1920, rates per shift were set as follows:

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Hewers .....	44	10.47	.826
Trammers .....	25 to 35	5.950 to 8.330	.470 to .657
Others .....	30 " 43	7.140 " 10.23	.563 " .808

A family allowance of 2 marks (par, \$.476; exchange 1920-21, \$.038) per shift for wife and each child was effective from October 1, 1920.<sup>2</sup>

<sup>1</sup>*Reichs-Arbeitsblatt*, March 31, 1921, p. 453.\*

<sup>2</sup>*Idem.*, November 26, 1920, p. 138.

# IV

## METAL MANUFACTURING

### Great Britain

#### *Iron and Steel*

Official figures show that in the heavy iron and steel trades (smelting, puddling, rolling, forging, etc.), in which wages fluctuated in correspondence with the selling price of the finished products, increases in wage rates up to the end of 1920 varied widely, in some cases equivalent to 300% to 350% of the pre-war level (e.g., for blast furnace laborers in certain districts), while in other cases they ranged between 150% and 200% (e.g., for the higher paid men in steel smelting shops). In the tin-plate and steel-sheet trades in South Wales the increases also varied considerably, ranging from 125% in the case of the highly paid workers to 206% for laborers.<sup>1</sup>

According to figures reported by the United States Trade Commissioner in London, February 8, 1921, common labor in the iron and steel industry was receiving 70 shillings 4 pence (par, \$17.11; exchange 1920-21, \$13.17) per week of 47 hours.<sup>2</sup>

The following rates per ton for iron puddlers were the result of reductions during February and March, 1921.<sup>3</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Northumberland, Durham and Cleveland	40 10	9.936	7.647
West of Scotland .....	42 2	10.260	7.897
Midlands .....	48 7	11.821	9.099

Rates per shift for blast-furnace workers in South Staffordshire, effective from the first full pay week after October 18, 1920, are given below:<sup>4</sup>

<sup>1</sup>*Labour Gazette*, February, 1921, p. 63.

<sup>2</sup>Figures obtained from the Ministry of Labour.

<sup>3</sup>*Idem.*, March, 1921, p. 151, April, 1921, p. 205.

<sup>4</sup>*Idem.*, December, 1920, p. 693.

RATES PER SHIFT FOR BLAST-FURNACE WORKERS IN SOUTH  
STAFFORDSHIRE, OCTOBER, 1920

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Keepers .....	27 3¼	6.636	5.107
Furnace fillers, chargers and bridge stockers .....	23 9½	5.79	4.457
Ore, mine, coke and lime wheelers, and barrow fillers .....	21 11⅞	5.334	4.107
Blast-enginemmen, stoveminders .....	21 4⅔	5.205	4.007
Loco-drivers .....	20 10¼	5.074	3.906
Slaggers, teasers, cinder catchers.....	20 7	5.008	3.855
Hoist and filling enginemmen, brakemen, pump and boilermen, boiler minders.	20 3⅞	4.945	3.806
Keepers' and sluggers' helpers, kiln- men, boiler-gasmen .....	19 9½	4.816	3.707
Assistant boiler-minders .....	19 6¼	4.750	3.656
Stokers and boiler firemen, cinder or slag tippers or tipmen.....	18 8⅝	4.550	3.505
Shunters and firemen .....	18 2⅞	4.441	3.420
Oilers, weighmen, boxmen, horse drivers, bogie strippers, scrappers, assistant cinder catchers, bye-turn laborers .....	17 7¾	4.294	3.305
Plate layers, general laborers .....	14 4	3.488	2.684

### *Engineering and Shipbuilding*

The wage rate of workers in the engineering and shipbuilding trades is made up of a basic weekly rate plus a war wage of 26 shillings, 6 pence, plus a bonus of 12½% on the total earnings. In the figures given in this section the total wage rate has been computed, including all of these factors.

According to a report of the United States Trade Commissioner in London, weekly wages in the engineering trades as of February 8, 1921, were as follows:<sup>1</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled machinists ..	83 10 to 89 5	20.40 to 21.76	15.70 to 16.76
Common labor .....	69 2 " 74 10	16.83 " 18.21	12.95 " 14.02

The following figures from the Ministry of Labour show the average time rates of wages for men in representative occupations in 16 principal engineering centers and 13 principal shipbuilding centers in Great Britain, with the percentage increases over August, 1914. The figures are based on the

<sup>1</sup>Figures obtained from the Ministry of Labour.

wages of a full ordinary week, which in 1914 was 53 or 54 hours and is now 47 hours.

For skilled men on time rates, the average increase was about 120% to 130%, while for laborers it was a little over 200%. For semi-skilled classes, the percentage ranged between these points.

AVERAGE WEEKLY RATES IN VARIOUS ENGINEERING AND SHIP-BUILDING OCCUPATIONS, DECEMBER 31, 1920

	Shillings and Pence	Dollars		Percentage increase over August, 1914
		Par of Exchange	Exchange 1920-21	
Engineering				
Fitters and turners .....	89 2	21.69	16.70	129
Ironmoulders .....	92 3	22.45	17.28	121
Patternmakers .....	93 5	22.73	17.50	122
Laborers .....	70 8	17.19	13.23	209
Shipbuilding				
Platers .....	90 0	21.90	16.86	123
Riveters .....	87 2	21.21	16.32	131
Shipwrights .....	91 3	22.20	17.09	121
Laborers .....	70 4	17.11	13.17	204

In the following tabulation are presented weekly wage rates for the engineering trades as given in the monthly reports of wage changes in the *Labour Gazette*. The changes reported were effective on dates from June, 1920, to February, 1921.

WEEKLY WAGE RATES IN ENGINEERING TRADES ADOPTED BETWEEN JUNE, 1920, AND FEBRUARY, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Iron moulders (10 districts) .....	86 0¾ to 100 3¾	20.94 to 24.41	16.12 to 18.79
Patternmakers (8 districts) .....	88 3¾ " 94 9⅛	21.49 " 23.06	16.54 " 17.76
Iron dressers—Rochdale .....	82 8¼	20.12	15.49
Brassmoulders —Manchester, Stockport and district .....	93 4½	22.72	17.49
Platemoulders (2 districts) .....	86 0¾ " 87 2¼	20.94 " 21.21	16.12 " 16.33
Fitters, turners, smiths, etc.—Yeovil .....	84 11¼	20.67	15.91
Blacksmiths — Aberdeen .....	88 1½	21.44	16.50
Laborers—Leeds .....	69 9	16.97	13.06

In all cases the rates given were increases over previous rates.<sup>1</sup>

### *Other Metal Trades*

In certain of the other metal trades, including the manufacture of light castings, railway carriage and wagon building, sheet metal working, gas meter making, bolt, nut, screw and rivet making and tube manufacturing, the general advances in weekly rates of wages were similar to those granted in the engineering trades.<sup>2</sup>

In those sections of the metal trades in which minimum rates of wages are fixed under the Trade Board's Acts, the following minimum hourly rates had been set by the end of December, 1920:

	Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Chain-making (women) ...	8 $\frac{5}{8}$ to 11 $\frac{1}{2}$	.175 to .233	.135 to .179
Hollow-ware trade (women)	8 $\frac{3}{4}$	.177	.137
Tin box trade .....	9	.182	.140

Increases in wages were reported for the following trades from October, 1920 to March, 1921, making weekly rates as listed on the next page:<sup>3</sup>

Decreases in the Birmingham brass foundry trade in April, 1921, resulted in the following weekly rates:<sup>4</sup>

### WEEKLY RATES IN THE BRASS FOUNDRY TRADE, BIRMINGHAM, APRIL, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Dressers .....	76 6 to 90 0	18.614 to 21.899	14.327 to 16.856
Polishers .....	76 6 " 92 3	18.614 " 22.447	14.327 " 17.277
Casters, principal hands .....	99 0	24.089	18.541
Moulders .....	85 6	20.804	16.013
Getters-down .....	77 8	18.898	14.546

<sup>1</sup>*Labour Gazette*, January to April, 1921.

<sup>2</sup>*Idem.*,

<sup>3</sup>*Idem.*, February, 1921, p. 63.

<sup>4</sup>*Labour Gazette*, May, 1921, p. 258.

WEEKLY RATES IN VARIOUS METAL TRADES, OCTOBER, 1920 TO  
MARCH, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Stamped or pressed metal ware<sup>1</sup>, (Great Britain)</i>			
Braziers, burnishers or drop stampers	80 3½ to 94 0	19.54 to 22.87	15.04 to 17.60
Dippers .....	68 6½ " 80 3½	16.68 " 19.54	12.84 " 15.04
Dippers who are also bronzers ..	80 3½ " 94 0	19.54 " 22.87	15.04 " 17.60
Annealers .....	80 3½	19.54	15.04
Brass polishers ..	80 3½ " 95 11½	19.54 " 23.35	15.04 " 17.97
<i>Light castings man- ufacture<sup>2</sup>, (England)</i>			
Berlin blackers, boxfitters, dres- sers and filers up	83 9¾	20.39	15.70
Fitters, pattern- filers, and sheet iron workers ...	86 0¾	20.94	16.12
Blacksmiths .....	87 2¼	21.21	16.33
Grinders and pol- ishers .....	90 6¾	22.04	16.96
<i>Textile machinery fittings, (Scotland)</i>			
Bobbin and shut- tlemakers			
Higher skilled .	77 0	18.74	14.42
Lesser skilled ..	70 6	17.15	13.20
Laborers, skilled	64 0	15.57	11.99
<i>Screw manufacture, (Birmingham and district)</i>			
Timeworkers, women .....	35 3	8.577	6.602
Pieceworkers, women <sup>3</sup> .....	40 0	9.733	7.491
<i>Sheet metal workers and braziers, (Hali- fax and district)...</i>	94 0	22.87	17.60
<i>Gold, silver and al- lied trades London<sup>4</sup></i>			
Men, over 21 ....	97 11	23.83	18.34
Women, over 21..	58 9	14.295	11.003
<i>Birmingham</i>			
Men, 21-23 yr....	70 0 to 86 0	17.03 to 20.93	13.11 to 16.11
Women, 1st to 4th year	25 0 " 40 0	6.08 " 9.73	4.68 " 7.49

<sup>1</sup>Minimum time rates. Converted from hourly rate on a basis of 47-hour week.

<sup>2</sup>Time work.

<sup>3</sup>Average.

<sup>4</sup>Minimum rate; weekly rate estimated from hourly rate on a basis of 47-hour week.

The following rates of wages were in effect in a linotype machine manufacturing establishment in England in May, 1921:<sup>1</sup>

MINIMUM WEEKLY WAGE RATES IN A LINOTYPE MACHINE FACTORY IN ALTRINCHAM, ENGLAND, MAY, 1921<sup>a</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Armature winders ....	90 0	21.90	16.86
Borers .....	84 11¼	20.67	15.91
Channel cutters .....	70 3¾	17.11	13.17
Capstan hands .....	70 3¾	17.11	13.17
Coremakers .....	88 3¾ to 89 5¼	21.49 to 21.76	16.54 to 16.75
Dressers .....	82 8¼	20.12	15.49
Drillers .....	80 5¼ " 82 8¼	19.57 " 20.12	15.06 " 15.49
Fitters .....	88 3¾	21.49	16.54
Laborers .....	68 0¾ " 70 3¾	16.56 " 17.11	12.75 " 13.17
Millers .....	84 11¼	17.11	15.91
Moulders .....	86 0¾ " 93 4½	20.94 " 22.72	16.12 " 17.49
Millwrights .....	90 6¾	22.04	16.96
Painters (machine) ...	72 6¾	17.66	13.59
Planers .....	84 11¼	20.67	15.91
Patternmakers .....	92 9¾	22.58	17.38
Press tool makers ....	90 6¾	22.04	16.96
Punch cutters .....	70 3¾	17.11	13.17
Stampers, matrix ....	70 3¾	17.11	13.17
Smiths .....	90 6¾	22.04	16.96
Strikers .....	73 8¼	17.93	13.80
Storekeepers .....	70 3¾	17.11	13.17
Turners .....	88 3¾	21.49	16.54

<sup>a</sup> Rates computed from base rate and 12½% bonus on earnings.

A premium bonus system is in operation at these works. Piece rates are fixed by arrangements between representatives of the employer and workmen concerned. These rates are so fixed that the average workman can earn 33.3% over present time rates, excluding war bonus. Each workman's day wage is guaranteed irrespective of his piece-work earnings. Overtime and night allowances are paid in addition to piece-work earnings.

### France

According to the Assistant Secretary General of the Employers' Association of the Metallurgical and Mining Industries, quoted by the United States Commercial Attaché, Paris, February 4, 1921, skilled laborers were, at that time receiving 250% to 325% above their pre-war wages, and the wages of common laborers had increased approximately 350%.

<sup>1</sup>Data from the Mergenthaler Linotype Company, New York City.



## Iron and Steel

Information from the Comité des Forges de France, the central organization of the French iron and steel industry, gives minimum daily wages in this industry in 1920 as follows:<sup>1</sup>

### MINIMUM DAILY WAGES IN IRON AND STEEL INDUSTRY, FRANCE, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled workers in various lines			
Paris .....	17	3.281	1.178
Rest of France .....	16 to 19	3.088 to 3.667	1.109 to 1.317
Ordinary workmen or helpers			
Paris .....	15	2.895	1.040
Rest of France .....	12 " 16	2.316 " 3.088	.832 " 1.109

This same report states that highly skilled workers paid on a piece basis received from 25 to 40 francs (par, \$4.83 to \$7.72; exchange 1920-21, \$1.74 to \$2.77) per day. Rates for common labor also would be somewhat higher than the minimum rates given above.

A comparison of hourly wage rates for common labor from three sources is given below. The figures from the Comité des

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Figures from the Comité des Forges de France <sup>1</sup>			
Paris .....	1.87½	.362	.130
Rest of France .....	1.50 to 2.00	.290 to .386	.104 to .139
Figures from the General Federation of Labour <sup>2</sup>			
Paris .....	2.50	.483	.173
Provinces .....	2.00	.386	.139
Figures from Employers' Association of Metallurgical and Mining Industries <sup>3</sup>			
Paris .....	2.25	.434	.156
Provinces .....	1.80	.347	.125

<sup>1</sup>Minimum rates. Hourly rates computed from daily rates given in previous table on basis of 8 hours per day.)

<sup>2</sup>Report of United States Commercial Attaché, Paris, February 4, 1921.

<sup>3</sup>United States Trade Commissioner, Paris; *Commerce Reports*, January 21, 1921.

<sup>4</sup>United States Trade Commissioner, Paris, November 6, 1920; *Commerce Reports*, January 21, 1921.

Forges de France are minimum rates, however, and the Secretary of the Employers' Association states (see below) that the figures of the General Federation of Labour were somewhat too high.

### Engineering

Tables of wages and wage rates in the French metal trades from various sources are given in this section. Upon comparison it appears that a representative figure for skilled male workers in these occupations was about 3 francs (par, \$579; exchange 1920-21, \$.208) per hour. Some were paid less than this, as is shown by the tables of minimum rates; highly skilled moulders, on the other hand, received as high as 6 francs (par \$1.158; exchange 1920-21, \$.416) per hour.

The following figures on hourly wages in the French engineering trades, furnished by the Employers' Association of Metallurgical and Mining Industries, were reported by the United States Commercial Attaché, Paris, February 3, 1921:

HOURLY WAGES IN FRENCH ENGINEERING TRADES,  
FEBRUARY, 1921

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled machinists			
Provinces .....	3.00 to 3.25	.579 to .627	.208 to .225
Blacksmiths			
Provinces .....	3.00 " 3.25	.579 " .627	.208 " .225
Turners			
Paris .....	3.60 " 3.75	.695 " .724	.249 " .260
Provinces .....	3.00 " 3.25	.579 " .627	.208 " .225
Fitters .....	2.85 " 3.50	.550 " .676	.198 " .243
Erectors .....	2.85 " 3.50	.550 " .676	.198 " .243
Inspectors .....	2.85 " 3.50	.550 " .676	.198 " .243
Moulders			
Day work .....	3.05 " 3.10	.589 " .598	.211 " .215
Piece work .....	3.00 " 3.70	.579 " .714	.208 " .256
Highly skilled moulders	up " 6.00	1.158	.416
Common male labor			
Paris .....	1.87 " 3.12	.361 " .602	.130 " .216
Female labor, semi-skilled			
Paris .....	2.50 <sup>3</sup>	.483	.173
Provinces .....	1.50 " 1.62	.290 " .313	.104 " .112

The same report also gives the following hourly wage rates furnished by the General Federation of Labour:

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled machinists			
Paris .....	3.50 to 5.00	.676 to .965	.243 to .347
Provinces .....	3.00 " 4.25	.579 " .820	.208 " .295
Common male labor			
Paris .....	2.50 " 3.12	.483 " .602	.173 " .216
Female labor, semi-skilled			
Paris .....	2.50 " 3.75	.483 " .724	.173 " .260
Provinces .....	2.50 " 3.00	.483 " .579	.173 " .208

As regards the figures from this source, however, the report states :

The Secretary of the General Federation of Labour could furnish no other figures than those given above, and he said that they were only an approximate average. He could not give exact figures because of the variation in wages paid since the industrial crisis set in about three months ago. In some cases, there have been reductions in the salaries. As a general rule, the wages paid in provinces are 20% less than those paid in the Paris region. The Secretary of the Employers' Association of the Metallurgical and Mining Industries stated that the figures furnished by the General Federation of Labour were somewhat too high. . . . He said that less than 10% of the skilled workers receive as high as 5 francs per hour.

According to wage figures furnished by the United States Trade Commissioner in Paris, November 6, 1920, hourly wages of blacksmiths had increased 200% since 1913, and wages of boring mill hands and operators, and punch press hands and operators about 323%. The hourly wage rates for these occupations in 1920, according to this source, were:<sup>1</sup>

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Blacksmiths .....	3.00	.579	.208
Boring mill hands and operators....	2.75	.531	.191
Punch press hands and operators...	2.75	.531	.191

Basic hourly wage rates in the French metal industry fixed by collective agreement in various localities, between February and September, 1920, and reported to the Ministry of Labour, are tabulated below. The rates varied according to the skill of the workers.<sup>2</sup>

<sup>1</sup>United States. Bureau of Foreign and Domestic Commerce. *Commerce Reports*, January 21, 1921.

<sup>2</sup>*Bulletin du Ministère du Travail*, August-October, 1920, p. 432-3.

HOURLY WAGE RATES IN THE FRENCH METAL INDUSTRY FIXED  
BY COLLECTIVE AGREEMENT BETWEEN FEBRUARY AND  
SEPTEMBER, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Vienne .....	1.975 to 2.475	.381 to .478	.137 to .172
Roanne .....	1.75 " 2.50	.338 " .483	.121 " .173
Paris (Lorraine) <sup>a</sup> ....	1.75 " 2.50	.338 " .483	.121 " .173
Lille .....	.65 <sup>b</sup> " 2.20	.125 " .425	.045 " .152
Maubeuge .....	.45 " 2.18	.0868 " .421	.0312 " .151
Zeneghem <sup>a</sup> .....	1.25 " 2.25	.241 " .434	.087 " .156
Limoges <sup>1</sup> .....	1.00 " 2.25	.193 " .434	.069 " .156

<sup>a</sup> Hourly rate computed from daily rate on basis of 8-hour day.

<sup>b</sup> Apprentices.

The daily wage scale of the Metallurgical Workers' Union, May 7, 1920, was reported by the United States Consul at Lyon, as follows:<sup>1</sup>

DAILY WAGE RATES OF METALLURGICAL WORKERS, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Ordinary mechanics .....	24.00 to 28.00	4.632 to 5.404	1.663 to 1.940
Tool edgers .....	24.00 " 27.20	4.632 " 5.250	1.663 " 1.885
Special workers (on hot or cold) .....	22.00 " 24.00	4.246 " 4.632	1.525 " 1.663
Oilers .....	22.00 " 24.00	4.246 " 4.632	1.525 " 1.663
Laborers .....	18.00 " 24.00	3.474 " 4.632	1.247 " 1.663
Skilled women .....	16.00	3.088	1.109
Unskilled women .....	12.00	2.316	.832
Pattern makers, mechanics	32.00 " 40.00	6.176 " 7.720	2.218 " 2.772
Fitters .....	26.00 " 28.80	5.018 " 5.558	1.802 " 1.996
Electricians, finishers, winders .....	28.00 " 32.00	5.404 " 6.176	1.940 " 2.218
Ordinary electricians ....	24.00 " 30.00	4.632 " 5.790	1.663 " 2.079
Coppersmiths, boiler makers .....	24.00 " 27.60	4.632 " 5.308	1.663 " 1.906
Molders .....	26.40 " 32.00	5.095 " 6.176	1.830 " 2.218
Ironmakers .....	22.00 " 30.00	4.246 " 5.790	1.525 " 2.079
Founders, smelters .....	24.00 " 28.80	4.632 " 5.558	1.663 " 1.996
Carpenters .....	24.00 " 30.00	4.632 " 5.790	1.663 " 2.079

According to a report of the United States Consul at Lyon, France, published in the *Monthly Labor Review* of the United States Department of Labor, for October, 1920, the following average daily rates were being paid metal workers in the Rhone region:

<sup>1</sup>United States. Bureau of Labor Statistics. *Monthly Labor Review*, October, 1920.

AVERAGE DAILY RATES IN METAL INDUSTRY IN RHONE REGION,  
1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Fitters, filers			
Mechanics, metallurgy .....	20.68	3.991	1.433
Automobiles .....	24.56	4.740	1.702
Electricity .....	20.85	4.024	1.445
Foundry .....	20.10	3.879	1.393
Fitters, automobile			
Motors .....	22.10	4.265	1.532
Chassis .....	20.98	4.049	1.454
Repairs .....	20.26	3.910	1.404
Fitters, tools			
Mechanics, metallurgy .....	21.07	4.067	1.460
Wire drawing .....	20.80	4.014	1.441
Fitters, copper work—foundry .....	20.66	3.987	1.432
Borers—mechanics, metallurgy .....	19.09	3.684	1.323
Trimmers, dressers—electricity .....	12.92	2.494	.895
Winders on bobbins—electricity .....	20.80	4.014	1.441
Coppersmiths and boilersmiths .....			
Mechanics, metallurgy .....	19.88	3.837	1.378
Automobiles .....	24.52	4.732	1.699
Furnace men, wire drawing .....	18.50	3.571	1.282
Boiler men, wire drawing .....	16.10	3.107	1.116
Foremen, electricity .....	22.00	4.246	1.525
Clippers, iron plate			
Mechanics, metallurgy .....	17.00	3.281	1.178
Electricity .....	15.26	2.945	1.058
Controlling-machine men—electricity..	17.60	3.397	1.220
Men on roller bridge—mechanics, met- allurgy .....	18.80	3.628	1.303
Electricians			
Mechanics, metallurgy .....	20.06	3.872	1.390
Automobiles .....	21.10	4.072	1.462
Electricity .....	19.45	3.754	1.348
Packers—electricity .....	15.20	2.934	1.053
Wire stretchers—wire drawing .....	21.80	4.207	1.511
Founders and casters—foundry .....	22.00	4.246	1.525
Blacksmiths—mechanics, metallurgy ...	21.44	4.138	1.486
Countersinkers			
Mechanics, metallurgy .....	21.67	4.182	1.502
Automobiles .....	23.15	4.468	1.604
Electricity .....	18.04	3.482	1.250
Masons—mechanics, metallurgy .....	18.76	3.621	1.300
Ordinary laborers			
Mechanics, metallurgy .....	15.02	2.899	1.041
Automobiles .....	14.87	2.870	1.030
Electricity .....	14.95	2.885	1.036
Foundry .....	14.12	2.725	.979
Cold-metal laborers—foundry .....	15.80	3.049	1.095
Hot-metal laborers—foundry .....	16.10	3.107	1.116
Woodworking machinists—automobiles	18.80	3.628	1.303
Repair mechanics			
Mechanics, metallurgy .....	19.00	3.667	1.317
Automobiles .....	18.40	3.551	1.275
Wire drawing .....	21.00	4.053	1.455

AVERAGE DAILY RATES IN METAL INDUSTRY IN RHONE REGION,  
1920—continued

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Joiners			
Mechanics, metallurgy .....	18.94	3.655	1.313
Electricity .....	23.00	4.439	1.594
Carriage men—automobiles .....	22.00	4.246	1.525
Carriage repair men—automobiles ....	20.98	4.049	1.454
Tool grinders—mechanics, metallurgy.	16.86	3.254	1.168
Pattern makers			
Mechanics, metallurgy .....	26.10	5.037	1.809
Automobiles .....	31.20	6.022	2.162
Molders—foundry .....	20.50	3.957	1.421
Engine fitters—mechanics, metallurgy.	18.92	3.652	1.311
Engine fitters, assistant-mechanics met-			
allurgy .....	16.09	3.105	1.115
Mortise men—mechanics, metallurgy .	22.09	4.418	1.586
Toolmakers—mechanics, metallurgy ..	22.15	4.275	1.535
Painters—mechanics, metallurgy .....	18.70	3.609	1.296
Borers—mechanics, metallurgy .....	18.67	3.603	1.294
Stampers—mechanics, metallurgy ....	16.80	3.242	1.164
Polishers—automobiles .....	21.00	4.053	1.455
Correctors			
Mechanics, metallurgy .....	18.20	3.513	1.261
Automobiles .....	19.82	3.825	1.374
Electricity .....	16.60	3.204	1.150
Riveters—mechanics, metallurgy .....	18.20	3.513	1.261
Autogenous solderers—mechanics, met-			
allurgy .....	21.80	4.207	1.511
Turners			
Mechanical metallurgy .....	21.42	4.134	1.484
Automobiles .....	25.80	4.979	1.788
Electricity .....	20.85	4.024	1.445
Parallel turners—automobiles .....	23.72	4.578	1.644
Vertical turners—automobiles .....	25.10	4.844	1.739
Stretchers—mechanics, metallurgy ....	21.83	4.213	1.513
Wire drawers—wire drawing .....	19.40	3.744	1.344

In the report of an agreement concluded in May, 1920 between the foundry workmen of Marseilles and their employers, the following minimum rates for an 8-hour day, including cost of living bonus, were given:<sup>1</sup>

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled .....	22.50	4.343	1.559
Semi-skilled .....	17.00	3.281	1.178
Unskilled .....	15.00	2.895	1.040

The following daily wage scales were reported for a large automobile factory near Lyon:<sup>1</sup>

<sup>1</sup>*Labour Overseas*, April-June, 1920, p. 41.



# DAILY WAGE RATES IN AUTOMOBILE FACTORY NEAR LYON

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled mechanics .....	26.00 to 30.00	5.018 to 5.790	1.802 to 2.079
Ordinary mechanics, carpenters, etc. ....	22.00 " 26.00	4.246 " 5.018	1.525 " 1.802
Unskilled laborers working at machines.....	20.00 " 24.00	3.860 " 4.632	1.386 " 1.663
Bricklayers, masons, etc..	20.00 " 24.00	3.860 " 4.632	1.386 " 1.663
Ordinary unskilled laborers	16.00 " 20.00	3.088 " 3.860	1.109 " 1.386
Unskilled female laborers at machines .....	12.00 " 20.00	2.316 " 3.860	.832 " 1.386
Unskilled female hands (sweepers, etc.) .....	11.20 " 16.00	2.162 " 3.088	.776 " 1.109

A Swiss report gives the following average hourly wages for the French machine industry at the end of 1920:<sup>1</sup>

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Lyon			
Non-certified workers over 20 years..	2.15	.415	.149
Average for adult workers .....	3.00	.579	.208
Paris			
Average for adult workers.....	2.80	.540	.194

Reports from various sources showed that in the spring of 1921 there was considerable unemployment in the French metal trades, and that curtailment in wages had been made in many districts, especially in the Rhone district and Lyon. The average cut in wages was about 15%, though in some instances it was as high as 20%.

## Germany

### General Metal Trades

Figures on average wages in the German iron and metal industry in February, 1920, were issued by the Federal Statistical Office. They cover the wages of 783,940 workmen, in 3,185 establishments. The following table gives the lowest and highest rates reported for the various localities. It is apparent from the other data in this section, however, that in general, wages had increased considerably over these figures by the end of 1920.

<sup>1</sup>L'Union Centrale des Associations patronales suisses. Bulletin No. 9, p. 10.

AVERAGE HOURLY WAGE RATES IN THE GERMAN IRON AND STEEL  
INDUSTRY, FEBRUARY, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Borers			
Time work .....	2.06 to 4.53	.491 to 1.079	.039 to .085
Piece work .....	2.64 " 5.18	.629 " 1.234	.050 " .097
Turners			
Time work .....	2.42 " 4.68	.577 " 1.115	.045 " .088
Piece work .....	2.57 " 5.41	.612 " 1.289	.048 " .102
Engine fitters			
Time work .....	2.37 " 4.21	.565 " 1.003	.045 " .079
Piece work .....	2.79 " 5.53	.665 " 1.318	.052 " .104
Locksmiths			
Time work .....	2.26 " 4.50	.539 " 1.072	.042 " .085
Piece work .....	2.79 " 5.38	.665 " 1.282	.052 " .101
Toolmakers			
Time work .....	2.39 " 4.94	.570 " 1.177	.045 " .093
Piece work .....	2.57 " 5.55	.612 " 1.323	.048 " .104

The Union of German Metal Workers has issued statistics covering 2,300,000 workers, which show that about 63% of those workers are receiving wages which are more than 800% greater than those of 1914, about 36% are receiving wages from 500 to 800% greater than in 1914, and the remainder are receiving wages which have not increased so much as 500%.<sup>1</sup>

Details of hourly wage rates fixed by collective agreements in the German metal industry between October 1, 1920, and February 1, 1921, are given below. In most of the agreements rates are definitely set for workers of various ages, but in this compilation only ranges of rates are given. The great variation between wage rates in different localities is due largely to the difference in cost of living in these districts. In agreements covering districts which include both urban and rural communities, provision is made for higher rates in the urban centers to take care of the higher living cost. Family allowances for workers who are heads of households are a feature of practically all the agreements.<sup>2</sup>

<sup>1</sup>United States Consul, Berlin, in Bureau of Foreign and Domestic Commerce. *Commerce Reports*, July 15, 1921.

<sup>2</sup>*Reichs-Arbeitsblatt*, November 1, 1920 to March 31, 1921.

**HOURLY WAGE RATES IN THE METAL INDUSTRIES FIXED BY  
COLLECTIVE AGREEMENT, OCTOBER, 1920, TO FEBRUARY, 1921**

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<b>Anhalt<sup>1</sup></b>			
Skilled men .....	4.40 to 4.85	1.049 to 1.156	.0826 to .0911
Trained men .....	4.25 " 4.70	1.013 " 1.120	.0798 " .0883
Unskilled men <sup>2</sup> .....	3.80 " 4.40	.906 " 1.049	.0714 " .0826
Machinists and stokers..	4.70 " 4.80	1.120 " 1.144	.0883 " .0901
Women .....	2.30	.548	.0432
Foundry workers, additional .....	.10	.0238	.0019
<b>Konstanz district<sup>3</sup></b>			
Skilled men .....	4.05 " 5.70	.965 " 1.358	.0761 " .1070
Trained men .....	3.70 " 5.10	.882 " 1.215	.0695 " .0958
Unskilled men .....	3.40 " 4.70	.810 " 1.120	.0639 " .0883
Women .....	2.35 " 2.95	.560 " .703	.0441 " .0554
<b>Harburg and vicinity<sup>4</sup></b>			
Smiths, turners, etc., over 20 years .....	5.60	1.334	.1052
Trained workers .....	5.40	1.287	.1014
<b>Darmstadt<sup>5</sup></b>			
Skilled men over 25 years	6.10	1.454	.1146
Trained men over 25 years	5.80	1.382	.1089
Helpers over 25 years....	5.40	1.287	.1014
Women over 20 years....	3.00	.715	.0563
<b>Württemberg<sup>6</sup></b>			
Skilled men over 25 years	4.10 to 4.30	.977 to 1.025	.0770 to .0808
Trained men over 25 years	3.83 " 4.00	.913 " .953	.0719 " .0751
Helpers over 25 years....	3.65 " 3.80	.869 " .906	.0685 " .0714
Women over 20 years....	2.06 " 2.15	.491 " .512	.0387 " .0404
<b>Gladbach and vicinity<sup>7</sup></b>			
Tool makers, head workmen .....	5.55 " 5.85	1.323 " 1.394	.1042 " .1099
Skilled men over 23 years	5.15 " 5.45	1.227 " 1.299	.0967 " .1024
Trained men over 23 years	4.85 " 5.15	1.156 " 1.227	.091 " .0967
Responsible helpers over 23 years .....	4.65 " 4.95	1.108 " 1.180	.0873 " .0930
Common helpers over 21 years .....	4.30 " 4.60	1.025 " 1.096	.0808 " .0864
Women over 19 years....	2.75 " 3.00	.655 " .715	.0516 " .0563

<sup>1</sup>Workers over 20. Minimum rate. Class I, according to locality, rates as above; Class II, 5% less.

<sup>2</sup>Married men and widowers in this group receive an additional house allowance of .20 mark (par, \$.0477; exchange 1920-21, \$.00376) per hour.

<sup>3</sup>Total for time workers over 20 years. Cost of living bonus for city of Konstanz, from .20 to .30 marks (par, \$.0477 to \$.0715; exchange, 1920-21, \$.00376 to \$.00563) per hour.

<sup>4</sup>Family allowance: wife, 8 marks (par, \$1.904; exchange 1920-21, \$1.1500) per week; each child, 16 marks (par, \$3.812, exchange 1920-21, \$3.005).

<sup>5</sup>Family allowance: .10 marks (par, \$.0238; exchange 1920-21, \$.00188) per hour for wife and each child.

<sup>6</sup>Minimum rate; must be increased at least 10% after 4 weeks. City of Stuttgart rates approximately 10% higher. Married men .20 marks (par, \$.0477; exchange 1920-21, \$.00376).

<sup>7</sup>Children bonus 1.50 marks (par, \$.357; exchange 1920-21, \$.0282) per shift.

HOURLY WAGE RATES IN THE METAL INDUSTRIES FIXED BY  
COLLECTIVE AGREEMENT, OCTOBER, 1920, TO FEBRUARY, 1921

—Continued

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Mannheim and Ludwigshafen <sup>1</sup>			
Skilled men .....	6.40 " 6.80	1.525 " 1.620	.1202 " .1277
Trained men .....	6.35 " 6.60	1.513 " 1.573	.1193 " .1239
Trained men for special work .....	6.00 " 6.30	1.430 " 1.501	.1127 " .1183
Unskilled men .....	5.85 " 6.00	1.394 " 1.430	.1099 " .1127
Women over 21 years...	3.75 " 4.15	.894 " .989	.0704 " .0779
Hamburg, Altona, Wandsbeck and vicinity <sup>2</sup>			
Skilled <sup>3</sup> .....	5.60	1.334	.1052
Trained men and ma- chinists over 21 years..	4.80 " 5.30	1.144 " 1.263	.0901 " .0095
Unskilled men over 21 years .....	4.80	1.144	.0901
Unskilled women over 18 years .....	3.30 " 3.40	.785 " .810	.0620 " .0639
Mainz, Wiesbaden and vicin- ity and the Rhine district <sup>1</sup>			
Men:			
Skilled .....	4.75 to 5.85	1.132 to 1.394	.0892 to .1099
Trained .....	4.60 " 5.65	1.096 " 1.346	.0864 " .1061
Helpers and common labor .....	4.60 " 5.53	1.096 " 1.323	.0864 " .1042
Women:			
Skilled .....	3.35 " 3.45	.798 " .822	.0629 " .0648
Unskilled .....	3.10 " 3.30	.739 " .786	.0582 " .0620
Sondershausen and vicinity <sup>3</sup>			
Workers over 21 years....	4.10 " 4.50	.977 " 1.072	.0770 " .0845

<sup>1</sup>Total wage for time workers over 25 years including cost of living bonus. Children allowance, .10 marks (par, \$.0238; exchange 1920-21, \$.00188) per hour each.

<sup>2</sup>Lock and machine marking.

<sup>3</sup>From 4 years after ended apprenticeship.

<sup>4</sup>Over 20 years. For rural districts, .10 marks (par, \$.0238; exchange 1920-21, \$.00188) per hour less.

<sup>5</sup>Married men, widowers, or separated persons receive also 2 marks (par, \$.477; exchange 1920-21, \$.0376) house-money daily and 1 mark (par, \$.238; exchange 1920-21, \$.0188) for each child under 14.

In the following table are given rates for the metal industry in the Düsseldorf area, as reported in December, 1920.<sup>1</sup> This wage agreement had been in force since April, 1920, and it was stated that the rates could be taken as representing in general the average wages paid in the German metal industry. The later agreements, presented above, however, show an increase over these rates. According to this report piece rates were fixed so

<sup>1</sup>Secretary to the British Embassy, Berlin. General report on the industrial and economic situation in Germany, December, 1920.

that an average worker could earn at least 15% above the fixed hourly wage, and in general piece-work earnings were about 40% higher than the basic rates.

HOURLY WAGE RATES IN THE MACHINE INDUSTRIES, FOUNDRIES,  
LOCOMOTIVE, WAGON AND ALLIED INDUSTRIES AND ENAMEL-  
LING WORKS, DÜSSELDORF, DECEMBER, 1920<sup>1</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled workers having a certificate of proficiency <sup>2</sup> .....	3.70 to 4.50	.882 to 1.072	.069 to .085
Skilled workers without a certificate of proficiency.....	3.60 " 4.30	.858 " 1.025	.068 " .081
Trained workers .....	3.55 " 4.05	.846 " .965	.067 " .076
Helpers or mates .....	3.55 " 3.85	.846 " .917	.067 " .072

<sup>1</sup>Workers over 21 years of age.

<sup>2</sup>Workers who can prove to have had long and varied experience and practical training, capable of working independently in their trade. (Doubtful cases are decided by a commission of experts.)

Provisions for female workers in this agreement were as follows:

1. Female workers doing men's work receive 20% less than do male workers of the same class.

2. Special female workers over 21 years, including jappanners, edgers, electro-oxy-acetylene welders, assemblers, printers, machine workers, cleaners in pickling shops, and sprayers receive from 2.50 to 2.70 marks (par, \$.596 to \$.643; exchange 1920-21, \$.047 to \$.051) per hour.

3. Female helpers or mates (cleaners, washers, packers and other helpers) receive 2.40 to 2.60 marks (par, \$.572 to \$.620; exchange 1920-21, \$.045 to \$.049) per hour.

The following special provisions were made:

1. Child allowance, 1 mark (par, \$.238; exchange 1920-21, \$.019) per shift, payable for all children up to the age of 14 years inclusive, or to the age of 16 years inclusive, if still at school. For weak and sickly people this child allowance is also paid above the age of 16, in so far as they are incapable of earning a living. A child allowance is also paid in the case of sole supporters of families.

2. Foremen and gangers working on piece work receive an hourly extra payment of not less than .20 marks (par, \$.048; exchange 1920-21, \$.0038). Foremen and gangers not working on piece work receive an extra payment of not less than .40 marks (par, \$.095; exchange 1920-21, \$.0075) per hour.

3. The increased cost of living bonus is an additional payment per hour, the piece-work basis remaining the same as before. Male workers over 21 years of age receive 1 mark (par, \$.238; exchange 1920-21, \$.019) per hour and women .50 to .80 marks (par, \$.119 to \$.191; exchange 1920-21, \$.0094 to \$.015) per hour. Workers above the age of 23 who are sole supporters of their family receive a bonus of one mark (par, \$.238; exchange 1920-21, \$.019) per hour.

The demand of the heavy iron workers of the Saar district for the payment of their wages in francs was conceded in December. Workers at blast furnaces, steel works and rolling mills received the following hourly rates, and in addition a cost of living bonus of 1.50 francs (par, \$.290; exchange, 1920-21, \$.104) per hour.<sup>1</sup>

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled workmen .....	1.70	.328	.118
Laborers .....	1.50	.290	.104
Casual laborers.....	1.40	.270	.097

The collective contract which came into force on December 1, 1920, fixed hourly wages in the small-scale metal industry in the Saar valley as follows for artisans and laborers:<sup>2</sup>

HOURLY WAGE RATES IN SMALL-SCALE METAL INDUSTRY IN SAAR VALLEY, DECEMBER, 1920<sup>1</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Artisans .....	5.65 to 7.20	1.346 to 1.716	.1061 to .1352
Laborers .....	4.90 " 6.30	1.168 " 1.501	.0920 " .1183
Casual laborers .....	4.85 " 5.90	1.156 " 1.406	.0911 " .1108
Allowances per month			
Wife .....	120	28.596	2.254
1 child .....	40	9.532	.751
2 children .....	50	11.915	.939
3 children or more.....	60	14.298	1.127

<sup>1</sup>Workers over 21 years of age.

The following average hourly rates were reported for the metal industry in the zone occupied by British troops (Cologne district) in August, 1920:<sup>3</sup>

<sup>1</sup>*Labour Overseas*, October-December, 1920, p. 50.

<sup>2</sup>International Labor Office. *Daily Intelligence*, March 21, 1921, p. 8.

<sup>3</sup>*Labour Overseas*, July-September, 1920, p. 135.



AVERAGE HOURLY WAGES FOR METAL INDUSTRY IN ZONE  
OCCUPIED BY BRITISH TROOPS, AUGUST, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Machine shops			
Turners, grinders, etc. ....	5.10 to 6.20	1.215 to 1.477	.0958 to .1164
Blacksmiths and Braziers	5.75 " 8.00	1.370 " 1.906	.1080 " .1502
Coppersmiths, etc. ....	5.30 " 6.40	1.263 " 1.525	.0995 " .1202
Foundries			
Moulders .....	5.50 " 7.75	1.310 " 1.847	.1033 " .1455
Casters .....	5.30 " 7.50	1.263 " 1.787	.0995 " .1409
Trimmers .....	5.15 " 6.30	1.227 " 1.501	.0967 " .1183
Trimmers' assistants ....	5.00 " 5.70	1.192 " 1.358	.0939 " .107
Semi-skilled machinists ..	5.00 " 6.00	1.192 " 1.430	.0939 " .1127
Machinists' assistants ....	4.70 " 5.30	1.120 " 1.263	.0883 " .0995
Motor repairs and coach building			
Artisans .....	6.40	1.525	.1202
Semi-skilled .....	5.80	1.382	.1089
Adult assistants .....	5.60	1.334	.1052
Electrical industry			
Indoor wiremen .....	3.50 " 6.50	.834 " 1.549	.0657 " .1221
Fitters and Erectors.....	5.00 " 6.50	1.192 " 1.549	.0939 " .1221

A Swiss report gives the following hourly wages for the German machine industry at the end of 1920:<sup>1</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Certified workers over 20 years....	6 to 8	1.430 to 1.906	.113 to .150
Non-certified workers over 20 years	5 " 6	1.192 " 1.430	.094 " .113
Average for adult workers.....	6.20	1.477	.116

### *Vehicle Manufacturing*

The following hourly wage rates in the Bremen vehicle industry were fixed in wage agreements concluded between October 1, 1920, and January 1, 1921:<sup>2</sup>

<sup>1</sup>L'Union Centrale des Associations patronales suisses. Bulletin No. 9, p. 10.

<sup>2</sup>Reichs-Arbeitsblatt, December 27, 1920 to February 15, 1921.

HOURLY WAGE RATES IN BREMEN VEHICLE-MAKING INDUSTRY  
FIXED BY COLLECTIVE AGREEMENT, OCTOBER 1, 1920, to  
JANUARY 1, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Carriage works			
Skilled men .....	5.05 to 5.30	1.203 to 1.263	.0948 to .0995
Unskilled men .....	4.65 " 4.90	1.108 " 1.168	.0873 " .0920
Women over 20 years.....	3.00	.715	.0563
Wagon making <sup>1</sup>			
Tool makers, turners, etc.	5.15 " 5.35	1.227 " 1.275	.0967 " .1005
Planers, polishers, etc.....	4.95 " 5.15	1.180 " 1.227	.0930 " .0967
Laborers .....	4.85 " 4.95	1.156 " 1.180	.0911 " .0930
Automobile works <sup>2</sup>			
Skilled men .....	5.30	1.263	.0995
Trained men .....	5.10	1.215	.0958
Helpers .....	4.90	1.168	.0920
Women .....	3.85	.917	.0723

<sup>1</sup>Over 21 years. Single men .05 mark (par, \$.0119; exchange 1920-21, \$.00094) per hour less.

<sup>2</sup>Over 20 years. Married workers .10 mark (par, \$.0238; exchange 1920-21, \$.00188) per hour additional bonus, and .15 mark (par, \$.0357; exchange 1920-21, \$.00282) for each child under 15 years.

### *Shipbuilding*

At the end of October, 1920, an unauthorized strike of 2,000 riveters for higher piece-rates broke out among the riveters in the Hamburg shipyards. At the end of December wage awards for North German shipyards, set December 6, were declared binding for this locality by the Ministry of Labor. The new rates in "first class" localities were as follows:<sup>1</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled workers .....	4.80	1.144	.0901
Semi-skilled workers .....	4.70	1.120	.0883
Unskilled workers .....	4.50	1.072	.0845

### *Electrical Industry*

Wage rates for the electrical industry in the various classes of localities, as incorporated in a national wage agreement in

<sup>1</sup>*Labour Overseas*, October-December, 1920, p. 86.

July, 1921, are shown in the following table. Youths from 18 to 21 years receive .10 marks (par, \$.024; exchange 1920-21, \$.002) less, according to this agreement; and additional cost-of-living bonuses are fixed at 9 marks (par, \$2.145; exchange 1920-21, \$.1691) per week for the wife, and twice that amount for children.

WAGE RATES IN THE ELECTRICAL INDUSTRY IN VARIOUS CLASSES  
OF LOCALITIES, JULY, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Class I .....	5.30 to 5.60	1.263 to 1.334	.0995 to .1052
Class II .....	5.10 " 5.40	1.215 " 1.287	.0958 " .1014
Class III .....	4.90 " 5.20	1.168 " 1.264	.0920 " .100
Class IV .....	4.70 " 5.00	1.120 " 1.192	.0883 " .094
Class V .....	4.50 " 4.80	1.072 " 1.144	.085 " .0901

# V

## TEXTILE MANUFACTURING

### Great Britain

#### Cotton

The British Ministry of Labour states that changes in wage rates for workers engaged in the cotton industry have generally been in the form of percentage additions to standard base price lists. In July, 1914 hourly wage rates stood at 5% above the standard base piece rates, and at the end of December, 1920 they had been raised to 215% above the standard. Of this increase, 30% was granted in 1919 concurrently with a reduction in working hours from 55½ to 48, in order to maintain weekly wages at the same level as before. In addition, special increases or allowances were granted to certain classes of operatives, e. g., blowing room men, strippers and grinders, and mule spinners, the effect of which was to augment slightly the increase resulting from the general alterations in wages. In May, 1920 an increase of 70% on list prices was granted, (equivalent to nearly 30% of current wages).<sup>1</sup>

According to the figures furnished by the United States Trade Commissioner in London in a report dated February 8, 1921, the following weekly wages were in effect in the cotton industry:<sup>2</sup>

WEEKLY WAGES OF SPINNERS AND LABORERS IN COTTON INDUSTRY, FEBRUARY, 1921

	Pounds and Shillings	Dollars	
		Par of Exchange	Exchange 1920-21
Spinners			
Mule .....	5 0 to 6 0	24.33 to 29.20	18.73 to 22.47
Ring .....	2 10 " 3 10	12.17 " 17.03	9.36 " 13.11
Day laborers	3 0 " 4 0	14.60 " 19.47	11.24 " 14.98

<sup>1</sup>*Labour Gazette.*

<sup>2</sup>Figures from the Secretary of the Association of Operative Cotton Spinners and Weavers.

## Woolen and Worsted

For woolen and worsted operators in Yorkshire, "cost of living" wages rise and fall in correspondence with fluctuations in the index number of retail prices and rents published by the British Ministry of Labour. Taking into account the increase in basic rates, as well as the cost of living wage, the general increase in pre-war rates up to the end of 1920 was equivalent to approximately 201% for time-workers, 156% for male piece-workers and 175% for female piece-workers.<sup>1</sup>

In the wool combing industry at Bradford the workers received an increase of 175% and an increase in basic rates also. In addition to these increases a general advance of over 15% on hourly and piece rates was granted in March, 1919, concurrently with a reduction in weekly hours from 55½ to 48, in order to maintain weekly wages at the same level as before.<sup>2</sup>

However, under the operation of sliding scales, by which wages fluctuate in correspondence with the official index number of retail prices and rents, wages had been reduced approximately 15% from January 1 to May 1, 1921 on hourly rates of wages current at the end of 1920.<sup>3</sup>

In a report dated February 8, 1921, the United States Trade Commissioner in London furnished the following estimated averages of total wages per 48-hour week (including war bonus) for workers in the woolen textile industry. These

AVERAGE WEEKLY WAGES IN WOOL TEXTILE INDUSTRY,  
FEBRUARY, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Spinners			
Woolen <sup>1</sup> .....	100	24.33	18.73
Worsted <sup>2</sup> .....	50	12.17	9.36
Weavers, piece rates			
Men .....	88	21.41	16.48
Women .....	60	14.60	11.24
Day laborers <sup>1</sup> .....	84	20.44	15.73

<sup>1</sup>Men.

<sup>2</sup>Mostly women and children.

<sup>1</sup>*Labour Gazette*, February, 1921, p. 63.

<sup>2</sup>*Idem.*,

<sup>3</sup>*Idem.*, May, 1921.

wage rates would probably show a 10% to 15% decrease by the end of April.

Full time weekly wage rates in various branches of the woolen and worsted industry, and in various localities, after decreases during April, 1921, are reported in the *Labour Gazette*<sup>1</sup> as follows:

WEEKLY WAGE RATES IN WOOLEN AND WORSTED INDUSTRY,  
APRIL, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Wool sorters</i>			
Bradford, Dewsbury, Halifax and Hyddersfield			
Time-workers	94 7½	23.025	17.722
<i>Mohair and alpaca sorters</i>			
West Riding of Yorkshire			
Time-workers	94 7½	23.025	17.722
<i>Wool carbonizing</i>			
West Riding of Yorkshire			
Skilled men and warehousemen ..	79 2	19.263	14.827
Semi - skilled men .....	76 3	18.554	14.280
Unskilled men.	73 2	17.803	13.703
<i>Wool combing and scouring</i>			
West Riding of Yorkshire			
Bowl minders			
With dryer .	79 10	19.425	14.952
Without dryer	78 8	19.141	14.733
Card grinders			
Wool cards .	82 1	19.973	15.373
Iron cards ..	87 3	21.230	16.347
Comb minders			
With noil ...			
Without noil.			
Card jobbers.. (8 or more)..	78 8	19.141	14.733
Warehousemen	72 8 to 79 4	17.682 to 19.304	13.609 to 14.858
Women			
Comb Minders	49 11 " 55 8	12.146 " 13.545	9.349 " 10.426
Others .....	48 8 " 51 8	11.842 " 12.572	9.115 " 9.676
<i>Worsted spinning</i>			
Yorkshire .....			
Yarn warehousemen ....	81 4½	19.80	15.240

<sup>1</sup>*Labour Gazette*, February, 1921, p. 65.



WEEKLY WAGE RATES IN WOOLEN AND WORSTED INDUSTRY,  
APRIL, 1921—*Continued*

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Woolen spinning, woolen and worsted manufac- ture, and Mungo and shoddy indus- tries</i>			
Yorkshire and Lancashire			
Men, over 21 years <sup>1</sup> .....	75 0 to 78 1½	18.249 to 19.010	14.046 to 14.632
Women, over 18 years ...	45 11½	11.182	8.607
<i>Mechanics in woolen and worsted indus- try</i>			
Yorkshire <sup>1</sup>			
Firemen and greasers ...	82 6	20.074	15.451
Day shift ..	82 7½	20.105	15.474
Night shift..	85 1½	20.713	15.943
Enginemmen			
Time rates			
Day shift ..	85 1½ or 88 4½	20.713 or 21.504	15.943 or 16.551
Night shift..	87 7½ " 91 1	21.321 " 22.163	16.411 " 17.059
Standing wages			
Day shift ...	91 9½ or 95 3	22.335 or 23.177	17.183 or 17.839
Night shift .	94 1½ " 97 6½	22.903 " 23.734	17.628 " 18.268
<i>Flannel industry</i>			
Wales (min. time rate)			
Men, 21 years and over ..	58 10	14.316	11.019
Stokers .....	63 8	15.492	11.924
Tuners .....	69 5	16.891	13.001
Wool sorters.	66 7	16.201	12.470
Women, 19 years and over .....	29 0	7.056	5.431

<sup>1</sup>Minimum rate.

### *Bleaching, Dyeing and Finishing*

In the bleaching, dyeing, printing and finishing sections also, wages are varied in accordance with the fluctuations in cost of living. In Lancashire, Cheshire, Derbyshire, and Scotland, the increases over pre-war weekly rates at the end of December, 1920 were 49 shillings, 7 pence (par, \$12.07; exchange

1920-21, \$9.29) for men, and 29 shillings, 6 pence (par, \$7.179; exchange 1920-21, \$5.52) for women, with certain additions to basic rates. In Yorkshire, the increases over the pre-war rates (including the "cost of living" wage and the increases in basic rates) amounted to 177% for time-workers and 138% for piece-workers.

The following tabulation of full-time weekly wage-rates for various branches of the trade and in various localities was compiled from the reports of wage decreases in the *Labour Gazette*:

WEEKLY WAGE RATES IN TEXTILE DYEING AND FINISHING, APRIL,  
1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Bleaching, dyeing, cal- ico printing and fin- ishing</i>			
Lancashire, Cheshire and Derbyshire <sup>1</sup>			
Males, 21 years and over .....	68 3	16.607	12.782
Females, 18 years and over .....	41 11	10.199	7.850
Scotland			
Men, timeworkers, 21 years and over.	65 3	15.877	12.220
Women, timework ers, 18 years and over .....	38 11	9.469	7.288
<i>Workpeople in grey room, and stock, pat- tern, making-up, and packing departments.</i>			
Bradford			
Men, 21 years and over .....	79 8	19.385	14.920
<i>Silk dyeing</i>			
Leek <sup>2</sup>			
Dyers and glossers.	65 0 to 67 0	15.816 to 16.303	12.174 to 12.548
Adult mixers .....	67 0 " 75 0	16.303 " 18.249	12.548 " 14.046
Dyeing machinemn	67 6 " 69 6	15.424 " 16.911	12.642 " 13.016

<sup>1</sup>Minimum rate.

The following full time weekly wage rates for the making-up and packing industry in Manchester are reported in the *Labour Gazette*:

WEEKLY WAGE RATES IN THE MAKING-UP AND PACKING  
INDUSTRY, MANCHESTER, JANUARY, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Men, 21 years and over			
Hydraulic packers and makers-up (prints) .....	93 9	22.81	17.56
Makers-up, greys .....	88 2	21.45	16.51
Clothlookers .....	84 0	20.44	15.73
Markers-off, stampers and pressers- off .....	83 3	20.26	15.59
Hoistmen, plaiters, cutters and lappers	79 1	19.24	14.81
General warehousemen .....	77 8	18.90	14.55
Porters .....	73 7	17.90	13.78
Women, 18 years and over			
Markers off .....	48 10	11.90	9.15
Cutters .....	46 1	11.21	8.63
Stitchers, plaiters, tiers-up, parcel- lers, sorters and tapers.....	44 8	10.87	8.37
General hookers .....	43 3	10.52	8.10
D'hootie hookers .....	40 6	9.86	7.59

### *Other Textile Trades*

Up to the end of 1920, hosiery workers in Leicestershire, Nottinghamshire and Derbyshire had received an increase of 125% over pre-war rates. Those engaged in the manufacturing of carpets had received advances of from 155% to 160%.<sup>1</sup>

Under sliding scale arrangements, similar to those in other branches of the textile trade, there were decreases in the wages of silk-workers at Brighouse and Leek, and linen-workers at Kirkcaldy, during March, 1921. Full time weekly wage rates for these industries in specified localities, as published in the *British Labour Gazette*,<sup>1</sup> are given below.

### *Hosiery*

The minimum hourly wage rates for time-workers in the hosiery industry in Dumfries and Maxwelltown effective in December, 1920, were reported as follows:<sup>1</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Men .....	1 2	.284	.218
Women .....	8	.162	.125

<sup>1</sup>*Labour Gazette*, February, 1921, p. 63.

## Silk

### WEEKLY WAGE RATES IN THE SILK INDUSTRY, MARCH, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Silk			
Brighthouse			
Male			
First framers .....	90 3	21.97	16.90
Warehousemen .....	81 5	19.81	15.25
Boilermen and machine-men....	83 5	20.30	15.62
Female			
Timeworkers			
Gassers .....	52 10½	12.87	9.90
Warpers .....	48 4½	11.77	9.06
Reelers .....	41 8	10.14	7.80
Winders .....	40 7	9.88	7.60
Piece-workers—15% over above....			
Leek <sup>1</sup>			
Men, 22 years and over			
Pickers .....	63 0	15.33	11.80
Braidworkers .....	64 6	15.69	12.08
Braid speeders and knitting tackers	71 0	17.28	13.30
Millmen .....	65 0	15.82	12.17
Weavers .....	69 0	16.79	12.92
Women, 18 years and over.....	39 0	9.49	7.30
Linen			
Kirkcaldy and district			
Tenters and dressers .....	74 0	18.01	13.86
Lappers and finishers .....	70 0	17.03	13.11
Laborers .....	61 0	14.84	11.42

<sup>1</sup>Minimum time rates.

## Jute

The following estimated average weekly wages in the jute industry at Dundee were given in a report of the U. S. Trade Commissioner in London, dated February 8, 1921 :<sup>1</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Spinners, time workers .	45 0	10.95	8.43
Weavers, piece-workers .	45 0 to 50 0	10.95 to 12.17	8.43 to 9.36

The following minimum hourly rates for women in the flax and hemp industry in Ireland were set under the Trades Boards Acts, January 24, 1921.<sup>2</sup>

<sup>1</sup>Estimated average rates, furnished by the Secretary, Dundee and District Union of Jute and Flax Workers.

<sup>2</sup>*Labour Gazette*, February, 1921, p. 96.

MINIMUM HOURLY RATES FOR WOMEN IN THE FLAX AND HEMP  
INDUSTRY IN IRELAND, JANUARY, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Preparers			
Spreaders and carders ....	7¼ to 8¼	.147 to .167	.113 to .129
Rovers and drawers .....	7¼ " 8	.147 " .162	.113 " .125
Doffers .....	5 " 6¼	.101 " .127	.078 " .098
Spinners			
Spinners and twistors ....	7¾ " 8¾	.157 " .178	.121 " .137
Piecers .....	7 " 8¼	.142 " .167	.109 " .129
Layers .....	5¾ " 7¼	.117 " .147	.090 " .113
Doffers .....	5½ " 6¾	.112 " .137	.086 " .105
Driers, reelers and winders			
Machine yarn driers .....	7¾ " 8¾	.157 " .178	.121 " .137
Reelers and wet winders...	7¼ " 8	.147 " .162	.113 " .125
Hank winders .....	8 " 8¼	.162 " .167	.125 " .129
All others except in weaving department			
Under 18 .....	5 " 5½	.101 " .112	.078 " .086
Over 18 .....	6½ " 7	.132 " .142	.101 " .109

By an order under the Trade Boards Acts of April 2, 1921, the following wage rates for workers in the rope, twine and net making industry, were fixed for all of Great Britain. These rates show an increase over the previous rates, which were set in March, 1920.

MINIMUM HOURLY RATES IN THE ROPE, TWINE AND NET MAK-  
ING INDUSTRY, APRIL, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Time workers			
Men, 21 years and over .....	1 3	.304	.234
Women homeworkers .....	0 8½	.172	.133
Piecoworkers			
Men .....	1 4	.324	.250

### France

Wage data for the French textile industry presented in this section are principally from reports of United States official representatives.

The Secretary of the French Textile Workers' Federation, in furnishing the wage data given below, stated that it was possible to give only approximate figures of wages in this industry,

as they varied widely in different parts of the country. The following figures give hourly rates for a 48-hour week in the various branches of the textile industry, as of about February 1, 1921:<sup>1</sup>

# HOURLY WAGES IN FRENCH TEXTILE INDUSTRIES, FEBRUARY, 1921

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Cotton			
Spinners <sup>1</sup> .....	1.88 to 2.62	.363 to .506	.130 to .182
Weavers .....	1.88 " 2.00	.363 " .386	.130 " .139
Day laborers .....	1.88 " 2.00	.363 " .386	.130 " .139
Wool			
Spinners .....	1.88 " 3.12	.363 " .602	.130 " .216
Weavers .....	2.00 " 2.55	.386 " .492	.139 " .177
Day laborers .....	2.25 " 2.55	.434 " .492	.156 " .177
Silk			
Weavers .....	2.12 " 2.55	.409 " .492	.147 " .177
Loom-fixers .....	3.12 " 3.75	.602 " .724	.216 " .260
Soft silk winders .....	1.88 " 2.37	.363 " .457	.130 " .164
Lace (Calais Machine)			
Operators .....	2.50 " 3.12	.483 " .602	.173 " .216
Erectors and repairers...	3.12 " 3.75	.602 " .724	.216 " .260

<sup>1</sup>Whether boys and according to skill.

According to figures from the United States Department of Commerce, average hourly wage rates in the French cotton industry in 1921 were as follows:

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Weaving .....	1.46 to 2.65	.282 to .511	.101 to .184
Dyeing .....	2.17 " 2.65	.419 " .511	.150 " .184
Finishing .....	1.40 " 2.25	.270 " .434	.097 " .156

The following figures for average hourly rates in the woolen textile industry are from the same source:

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Spinners			
Combed wool .....	2.35 to 3.50	.454 to .676	.163 to .243
Carded wool .....	2.50 " 3.28	.483 " .233	.173 " .228
Dyers .....	2.17 " 2.65	.419 " .511	.150 " .184
Finishers .....	1.40 " 2.25	.270 " .434	.097 " .156

<sup>1</sup>Data from French Textile Workers' Federation, reported by United States Commercial Attaché, Paris, Feb. 3, 1921.



In an agreement covering silk weaving for the Charlieu (Loire) region, dated November 3, 1920, provision was made for the establishment of a commission to determine the variations in the cost of living. This commission found that the fluctuation of expenses during the period May 1 to September 1, 1920 was more than 10.8% and decided upon an increase in wages in consequence.<sup>1</sup> An agreement in the cotton industry in Lille, November 20, 1920 also made provision for revision of wage rates in case of increase in the official figure for the cost of living.<sup>2</sup>

The following daily wage rates for the silk industry, fixed by collective agreement in March and April of 1920, are reported in the Bulletin of the French Ministry of Labor:<sup>3</sup>

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Weaving and throwing, Lyon <sup>1</sup> ...	12 to 18	2.316 to 3.474	.832 to 1.247
Weaving, Oullins (Rhône) <sup>2</sup> ....	16 " 17	3.088 " 3.281	1.109 " 1.178

<sup>1</sup>Minimum rates.

<sup>2</sup>Normal wage.

According to figures from the American consul at Lyon, France, in 1920, the following scale of minimum wages was in force in the silk industry in that city, as a result of a strike

MINIMUM DAILY WAGE RATES IN THE SILK INDUSTRY IN LYON,  
FRANCE, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Drying and testing .....	10	1.93	.693
Silk throwing and twisting....	10	1.93	.693
Weaving .....	10 to 6	1.93 to 3.088	.693 to 1.109
Reel men and reel women ....	11	2.123	.762
Throwers and twisters .....	12	2.316	.832
Warpers .....	12	2.316	.832
Winders or spinners .....	9	1.737	.624
Twillers .....	9	1.737	.624
Sorters .....	8	1.544	.554
Warp folders .....	7	1.351	.485
Reelers .....	7	1.351	.485
Weighers .....	12	2.316	.832

<sup>1</sup>*Bulletin du Ministère du Travail*, November-December, 1920, p. 547.

<sup>2</sup>*Idem.*, p. 548.

<sup>3</sup>*Idem.*, p. 547.

in 1919. According to the figures from the later wage agreement given above, however, wages for silk throwing and weaving have been increased 2 francs per day or .25 francs per hour over this schedule.<sup>1</sup>

A Swiss report states that the average hourly wage for skilled silk dyers in France at the end of 1920 was 2.25 francs (par, \$.434; exchange 1920-21, \$.156).<sup>2</sup>

According to figures from the United States Consul, Marseilles, France, March 8, 1921, wages paid to cotton thread mill operatives in Marseilles range from 8 to 12 francs (par, \$1.544 to \$2.316; exchange 1920-21, \$.554 to \$.832) per 8-hour day.<sup>3</sup>

In a report of the visit of representatives of the British woolen and worsted trades to Roubaix and Tourcoing (the headquarters of the French wool-textile industry), mention is made of a body known as the Consortium of Textile Industry, with headquarters at Tourcoing. This body embraces the principal employers' associations and includes 312 mills employing 68,000 men and women. The Consortium deals with all wage questions concerning the affiliated firms, and decides labor conditions in the industry. It publishes periodical returns of the average wages in force in each mill, and performs many other duties in connection with wages. It pays a bonus of 3 francs (par, \$.579; exchange 1920-21, \$.208) per working-day per child under 13 years of age to the head of the family working in any of the mills; this is paid direct to the employee by the employer at the end of each month. There is also a premium of 200 francs (par, \$38.60; exchange 1920-21, \$.13.86) paid to the head of the family at the birth of each child.<sup>4</sup>

## Germany

Statistics of wages in the German textile industry, as of February, 1921, were secured by the Statistische Reichsamt<sup>5</sup> from 1,327 establishments with 222,820 employees. Only

<sup>1</sup>Figures from United States Consul at Lyon, France, published in *Monthly Labor Review*, October, 1920, p. 135.

<sup>2</sup>L'Union Centrale des Association patronales suisses. Bulletin No. 9, p. 11.

<sup>3</sup>United States. Bureau of Foreign and Domestic Commerce. *Commerce Reports*, April 11, 1921.

<sup>4</sup>United States Consul, Bradford, England in *Commerce Reports*, March 11, 1921.

<sup>5</sup>Federal Statistical Bureau.

16,144 of these employees were reported, of whom 42% were male and 58% female. Of the male workers 57% and of the female workers 53% were pieceworkers. Wages and earnings varied greatly at different places. The average hourly wages in the various localities ranged as follows, although, as may

AVERAGE HOURLY WAGES IN GERMAN TEXTILE INDUSTRY,  
FEBRUARY, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Finishers			
Men			
Timework .....	2.08 to 4.00	.495 to .952	.039 to .075
Piecework .....	2.67 " 3.85	.635 " .916	.050 " .072
Women			
Timework .....	1.34 " 2.42	.319 " .576	.025 " .045
Piecework .....	1.66 " 3.02	.395 " .719	.031 " .057
Carders			
Men			
Timework .....	1.96 " 3.61	.466 " .859	.037 " .068
Piecework .....	3.10 " 3.37	.738 " .802	.058 " .063
Women			
Timework .....	1.50 " 2.57	.357 " .612	.028 " .048
Piecework .....	1.98 " 2.89	.471 " .687	.037 " .054
Shearers			
Men			
Timework .....	2.00 " 3.77	.476 " .897	.038 " .071
Piecework .....	2.77 " 4.47	.659 " 1.063	.052 " .084
Women			
Timework .....	2.00 " 2.70	.476 " .643	.038 " .051
Piecework .....	1.74 " 3.63	.414 " .864	.033 " .068
Spinners			
Men			
Timework .....	2.23 " 3.91	.531 " .931	.042 " .073
Piecework .....	2.15 " 3.80	.512 " .904	.040 " .071
Women			
Timework .....	1.36 " 2.49	.324 " .593	.026 " .047
Piecework .....	1.45 " 2.59	.345 " .616	.027 " .049
Weavers			
Men			
Timework .....	1.98 " 3.87	.471 " .921	.037 " .073
Piecework .....	2.60 " 5.14	.619 " 1.223	.049 " .097
Women			
Timework .....	1.38 " 3.00	.328 " .714	.026 " .056
Piecework .....	1.34 " 3.52	.319 " .838	.025 " .066

be seen from the other figures presented in this section, wages had substantially increased between this date and the end of 1920, probably about 50%.<sup>1</sup> Average monthly earnings on this basis are shown below :

AVERAGE MONTHLY (FOUR WEEKS) EARNINGS IN GERMAN  
TEXTILE INDUSTRY, FEBRUARY, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Finishers			
Men			
Timework .....	390 to 667	92.82 to 158.75	7.32 to 12.53
Piecework .....	465 " 708	110.67 " 168.50	8.73 " 13.30
Women			
Timework .....	256 " 416	60.93 " 99.01	4.81 " 7.81
Piecework .....	193 " 512	45.93 " 121.86	3.62 " 9.62
Carders			
Men			
Timework .....	347 " 661	82.59 " 157.32	6.52 " 12.41
Piecework .....	584 " 621	138.99 " 147.80	10.97 " 11.66
Women			
Timework .....	250 " 454	59.50 " 108.05	4.70 " 8.53
Piecework .....	352 " 463	83.78 " 110.19	6.61 " 8.70
Shearers			
Men			
Timework .....	368 " 672	87.58 " 159.94	6.91 " 12.62
Piecework .....	479 " 773	114.00 " 183.97	9.00 " 14.52
Women			
Timework .....	345 " 492	82.11 " 117.10	6.48 " 9.24
Piecework .....	296 " 613	70.45 " 145.89	5.56 " 11.51
Spinners			
Men			
Timework .....	429 " 706	102.10 " 168.03	8.06 " 13.26
Piecework .....	360 " 662	85.68 " 157.56	6.76 " 12.43
Women			
Timework .....	229 " 448	54.50 " 161.13	4.30 " 8.41
Piecework .....	253 " 459	60.21 " 109.24	4.75 " 8.62
Weavers			
Men			
Timework .....	343 " 614	81.63 " 146.13	6.44 " 11.53
Piecework .....	471 " 944	112.10 " 224.67	8.85 " 17.73
Women			
Timework .....	241 " 544	57.36 " 129.47	4.53 " 10.22
Piecework .....	227 " 585	54.03 " 139.23	4.26 " 10.99

<sup>1</sup>United States Consul, Berlin, March 10, 1921, in *Commerce Reports*, April 8, 1921, p. 150.

The following hourly wage rates, fixed by collective agreement to take effect on dates between December 7, 1920 and March 1, 1921, have been reported in the *Reichs-Arbeitsblatt*. Range of rates between workers of various ages and different degrees of skill are indicated. Rates vary between localities mainly according to the cost of living.

HOURLY WAGE RATES FOR THE TEXTILE INDUSTRY FIXED BY  
COLLECTIVE AGREEMENT IN SPECIFIED LOCALITIES, DECEMBER,  
1920 TO MARCH, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Thüringen</i> <sup>1</sup>			
Men .....	4.10 to 4.40	.976 to 1.047	.077 to .083
Women .....	2.80 " 3.10	.666 " .738	.053 " .058
Artisans .....	4.50 " 5.20	1.072 " 1.239	.085 " .098
Machinists .....	4.60 " 5.20	1.095 " 1.239	.086 " .098
<i>Harburg</i> <sup>2</sup>			
Men .....	5.60 " 6.10	1.333	.105
Women .....	3.50	.833	.066
<i>Euskirchen and vicinity</i> <sup>3</sup>			
Weavers on power looms			
Men .....	5.25	1.250	.099
Women .....	4.00	.925	.075
Carders, willowers (men), and pickers, spinners, twis- ters, (women) .....	3.60 " 4.00	.857 " .952	.068 " .075
Warpers, winders (women)	4.00 " 4.40	.952 " 1.047	.075 " .083
Burlers, cloth shearers (women) .....	3.50 " 3.90	.834 " .929	.066 " .073
<i>Reichenbach and vicinity</i> <sup>4</sup>			
(Wool spinning)			
Mule spinners			
Up to 4 machines.....	6.00	1.428	.113
For each further machine.	.10	.0238	.0019
Card strippers .....	5.80	1.380	.109
Willowers, pickers, carders, dusters .....			
Men .....	5.50	1.309	.103
Women .....	4.25	1.012	.080
Spoolers			
Men .....	4.15	.988	.078
Women .....	4.00	.952	.075
Feeders			
Men .....	3.90	.928	.073
Women .....	3.80	.904	.071

<sup>1</sup>Workers 20 years and over. Base rate plus cost of living bonus. Rates vary according to locality. Family bonus 6 marks (par, \$1.428; exchange 1920-21, \$.113) per week for each person requiring support.

<sup>2</sup>Workers 20 years and over. Family bonus: 8 marks (par, \$1.904; exchange 1920-21, \$.150) per week for wife and 16 marks (par, \$3.808; exchange 1920-21, \$.300) for each child.

<sup>3</sup>Family allowance: man and wife 10 marks (par, \$2.38; exchange 1920-21, \$.188) per week; each child 7 marks (par, \$1.666; exchange 1920-21, \$.131). If worker is sole support of family 10 marks (par, \$2.380; exchange 1920-21, \$.188) extra.

<sup>4</sup>Workers over 20 years of age.

HOURLY WAGE RATES FOR THE TEXTILE INDUSTRY FIXED BY  
COLLECTIVE AGREEMENT IN SPECIFIED LOCALITIES, DECEMBER,  
1920 TO MARCH, 1921—*Continued*

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Münsterland</i> <sup>1</sup>			
Weaving <sup>2</sup>			
Men .....	4.25 to 4.50	1.012 to 1.071	.080 to .085
Women .....	3.65 " 3.90	.869 " .928	.069 " .073
Spooling and reeling			
Cotton .....	4.68 " 4.95	1.114 " 1.178	.088 " .093
Linen .....	4.89 " 5.18	1.164 " 1.233	.092 " .097
Spinning			
Men			
Mule spinners .....	5.15 to 5.40	1.225 to 1.285	.097 to .101
Throstle spinners, twist- ters, drawers .....	4.25 " 4.50	1.012 " 1.071	.080 " .085
Women			
Spinners, drawers .....	3.65 " 3.95	.869 " .928	.069 " .073
Jute Spinning			
Men .....	4.25 " 4.50	1.012 " 1.071	.080 " .085
Women .....	3.40 " 3.90	.810 " .928	.064 " .073
Silk hand weavers .....	3.65 " 3.90	.869 " .928	.069 " .073
Helpers			
Men .....	4.25 " 4.50	1.012 " 1.071	.080 " .085
Women .....	3.05 " 3.30	.726 " .786	.057 " .062
Artisans over 23 years .....	4.75 " 6.00	1.132 " 1.428	.089 " .113
<i>Bremen</i> <sup>3</sup>			
(Wool combing)			
Artisans and stakers over 20 years .....	6.15	1.466	.115
Trained workers .....	5.70	1.358	.107
Hand workers over years.	5.50	.311	.103
Women over 20 years.....	3.80	.906	.071
Sorters			
Men .....	5.50 to 5.80	1.309 to 1.380	.103 to .109
Women .....	3.70 " 4.10	.881 " .976	.069 " .077
<i>Lesum near Bremen</i> <sup>4</sup>			
(Wool scouring)			
Artisans .....	5.50	1.309	.103
Workers			
Men .....	5.00	1.190	.094
Women .....	3.40	.810	.064
Sorters, women .....	3.90	.928	.073
<i>Bremen</i> <sup>5</sup>			
(Rope factory)			
Men			
Skilled .....	5.40	1.285	.101
Other .....	5.30	1.262	.099
Women .....	3.35	.797	.063

<sup>1</sup>Workers over 20 years of age. Family bonus 1.50 marks (par, \$.357; exchange 1920-21, \$.028) per day for each child.

<sup>2</sup>Time work. Rate varies according to locality.

<sup>3</sup>Certain designated classes of workers receive from .10 to .20 marks (par, \$.0238 to .0476; exchange, 1920-21, \$.0019 to .0038) higher than their group. Family allowance for married workers of 50 marks (par, \$11.90; exchange 1920-21, \$.939) per month, and the same amount for each child under 15 years.

<sup>4</sup>Workers over 20 years of age. Head workers on the scouring machines, and all workers, men and women, in the willowing and carbonizing sections receive .20 marks (par, \$.0476; exchange, 1920-21, \$.0038) extra per hour. The first five sorters receive .10 marks (par, \$.0238; exchange 1920-21, \$.0019) extra per hour.

<sup>5</sup>Workers over 20 years of age.



HOURLY WAGE RATES FOR THE TEXTILE INDUSTRY FIXED BY  
COLLECTIVE AGREEMENT IN SPECIFIED LOCALITIES, DECEMBER,  
1920 TO MARCH, 1921—*Continued*

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Saxony</i>			
(Hand printing)			
Men .....	5.50 " 6.00	1.309 " 1.428	.103 " .113
Women .....	4.10	.976	.077
<i>Stettin</i> <sup>1</sup>			
(Hemp spinning and rope manufacture)			
Workers, men .....	5.00	1.190	.094
Helpers			
Men .....	3.70	.881	.069
Women .....	3.00	.714	.056
<i>Hainichen</i> <sup>1</sup>			
(Cloth and flannel)			
Spinning			
Men			
Willowers .....	5.20	1.238	.098
Card strippers.....	5.70	1.356	.107
Spinners			
Up to 4 machines..	5.80	1.380	.109
Each further ma- chine .....	.10	.0238	.0019
Spinners' helpers ....	5.10	1.213	.096
Women			
Sorters .....	3.50	.833	.066
Piecers .....	3.60	.858	.068
Ring spinners, creelers and twistors .....	3.60	.904	.071
Carders .....	3.90	.928	.073
Willowers .....	4.00	.952	.075
Spinners' helpers ....	3.80	.904	.071
Weaving			
Weavers			
Men .....	5.20	1.238	.098
Women .....	4.30	1.023	.081
Helpers			
Men .....	5.10	1.213	.096
Women .....	3.80	.904	.071
Warpers, women .....	4.00	.952	.075
Sizers, men .....	5.40	1.285	.101
Dyeing and finishing			
Stitchers, seamstresses..	3.60	.857	.068
Skilled sewers, women.	3.80	.904	.071
Fullers, men .....	5.60	1.333	.105
Scourers .....	5.40	1.285	.101
Dyeing and drying helpers			
Men .....	5.30	1.262	.099
Finishing helpers			
Men .....	5.10	1.213	.096
Women .....	3.80	.904	.071

<sup>1</sup>Workers over 20 years of age.

Certain wage rates for the German textile industry have been reported in *Labour Overseas*. The following hourly wages were in effect in the zone occupied by British troops (Cologne district) in August, 1920:<sup>1</sup>

AVERAGE HOURLY WAGES IN TEXTILE INDUSTRY IN ZONE  
OCCUPIED BY BRITISH TROOPS, AUGUST, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled			
Men .....	6.10	1.452	.115
Women .....	3.50	.833	.066
Semi-skilled			
Men .....	5.60	1.333	.105
Women .....	3.50	.833	.066
Unskilled			
Men .....	5.06	1.205	.095
Women .....	3.30	.786	.062

Hourly rates for "Class I" districts in Southern Bavaria in July, 1920, were reported as follows:<sup>2</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Men			
Up to 25 years .....	3.70	.881	.069
Over 25 years .....	4.00	.952	.075
Women			
Up to 25 years .....	2.60	.619	.049
Over 25 years .....	2.80	.666	.053

The following figures are taken from a wage table for Saxony contained in a periodical report of the International Federation of Textile Workers' Association:<sup>3</sup>

WEEKLY WAGES IN THE TEXTILE INDUSTRY IN SAXONY,  
SPRING, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Men			
Cotton spinners			
Over 20 .....	241.96	57.59	4.54
Between 18 and 20....	193.20	45.98	3.63
Helpers .....	92.00 to 161.00	21.90 to 38.32	1.73 to 3.02
Cloth weavers .....	202.40	48.17	3.80
Women .....	174.80	41.60	3.28

<sup>1</sup>*Labour Overseas*, July-September, 1920, p. 135.

<sup>2</sup>*Idem.*, p. 47.

<sup>3</sup>*Idem.*, October-December, 1920, p. 47.

Details of a collective agreement for the textile industry in the district on the right bank of the Rhine, dated October 1, 1920, are given below:

1. The *basic scale* of minimum hourly time rates for workers over 20 years of age, to which must be added cost of living bonus and family allowances, were as follows:<sup>1</sup>

	Marks	Par of Exchange	Dollars Exchange 1920-21
Men .....	4.00	.952	.075
Women .....	3.00	.714	.056

2. The *cost-of-living bonus* for workers over 20 years of age was 1.30 marks (par, \$.309; exchange, 1920-21, \$.024) per hour for men time workers receiving 4 marks per hour, and 1.15 marks (par, \$.274; exchange 1920-21, \$.022) for other male workers. Women received .90 marks (par, \$.214; exchange 1920-21, \$.017).

3. *Family allowance* in addition to the above was 5 marks (par, \$1.190; exchange 1920-21, \$.094) per week for husband or wife who was not working, and for each child less than 14 years of age.

4. There are four classes of towns, in three of which classes the above basic rates were to be reduced by .20 and .40 marks (par, \$.0476, \$.0714 and \$.0952; exchange 1920-21, \$.0038, \$.0056 and \$.0075) respectively.

5. As a rule *piece-work rates* were the same for both men and women, and were fixed so that an average worker could earn up to 15% more than the fixed time work rates.

6. Base wage rates set for certain branches of the industry by this agreement are as follows:

#### HOURLY WAGE RATES IN THE GERMAN TEXTILE INDUSTRY IN DISTRICT ON RIGHT BANK OF RHINE, OCTOBER, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Piece dyeing and finishing			
Men 20 years and over			
First year .....	4.00	1.952	.075
After first year .....	4.30	1.023	.081
Skilled men .....	4.60	1.095	.086
Independent dyers .....	5.10	1.215	.096
Special finishers .....	4.60	1.095	.086
Cloth weaving			
Men			
Weavers <sup>a</sup> .....	4.30	1.023	.081
Warpers, sizers, drawers- in, piecers, twistors, card punchers, designers, in- spectors, reed makers, and fancy weavers			
Time work .....	4.50	1.072	.085
Piece-work basis .....	4.30	1.023	.081

<sup>a</sup>Additions of .05 or .10 marks (par, \$.0119 to \$.0238; exchange, 1920-21, \$.00094 to \$.0019) per hour variously for single warp, multi-colored warp, yarn coarser than 6 metric or than 10 metric, 9 to 16 dobbies, 17-24 dobbies, more than 24 dobbies, drafting, 5,000-10,000 warp threads, more than 10,000 warp threads, etc.

<sup>1</sup>From printed agreement in possession of Colonel John Wood, Philadelphia, Pennsylvania.

HOURLY WAGE RATES IN THE GERMAN TEXTILE INDUSTRY IN  
DISTRICT ON RIGHT BANK OF RHINE, OCTOBER, 1920—

*Continued*

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Women			
Weavers and warpers			
20 years and over <sup>b</sup> .....	3.20	.762	.060
Speckers .....	3.10	.738	.058
Menders, 20 years and over	3.30	.786	.062
Worsted yarn spinning <sup>c</sup>			
Sorting, women			
Time work .....	3.00 to 3.20	.714 to .762	.056 to .060
Piece work basis .....	3.10	.738	.058
Scouring, men			
Scourers .....	4.60	1.095	.086
Helpers .....	4.30	1.023	.081
Carding			
Men .....	4.30 " 4.60	1.023 " 1.095	.081 " .086
Women .....	3.10	.738	.058
Combing, women .....	3.00 " 3.20	.714 " .762	.056 " .060
Dyeing			
Machine dyers, men.....	4.60	1.095	.086
Other men workers .....	4.30	1.023	.081
Vigoureux printers,			
women .....	3.10 " 3.20	.738 " .762	.058 " .060
Gil-box tenders, women....	3.00 " 3.20	.714 " .762	.056 " .060
Drawing, women			
Time work .....	3.00 " 3.20	.714 " .762	.056 " .060
Piece work basis.....	3.10	.738	.058
Spinning			
Men .....	4.40	1.047	.083
Women			
Mule spinning			
1st feeders.....	3.20	.762	.060
2nd feeders .....	3.10	.738	.058
Creelers and reserves.	3.00	.714	.056
Ring spinning			
Machine girls and 1st			
piecers .....	3.20	.762	.060
Ring spinners and 2nd			
piecers .....	3.10	.738	.058
Reserves .....	3.00	.714	.056
Piece work basis ....	3.10	.738	.058
Twisting, women			
Machine girls and 1st			
twisters .....	3.20	.762	.060
2nd twisters .....	3.10	.738	.058
Reserves .....	3.00	.714	.056
Piece work basis .....	3.10	.738	.058

<sup>b</sup>To be considered piece workers; if employer refuses, time rates to be increased 15%.

<sup>c</sup>Workers 20 years or over. Sorting, drawing, spinning, twisting, and spooling to be considered piece work; if employer refuses, time rates to be increased 15%.

## VI CLOTHING MANUFACTURING

### Great Britain

In the tailoring trade the minimum rate of wages for women, fixed under the Trade Boards Act, had been increased from 3¼ pence (par, \$.066; exchange 1920-21, \$.051) per hour, in July, 1914, to 9¼ pence (par, \$.188; exchange 1920-21, \$.144) at the end of 1920, while for men it was raised from 6 pence to 1 shilling, 2 pence (par, \$.122 to \$.284; exchange 1920-21, \$.094 to \$.218) per hour. For some classes of workers, higher minima had been fixed. No decreases in wages in this trade had been reported up to April, 1921.<sup>1</sup>

As a result of decreases in the custom tailoring trade in Birmingham, rates for male workers on ordinary work were 1 shilling, ½ pence (par, \$.253; exchange 1920-21, \$.195) per "log" hour,<sup>2</sup> effective April 18, 1921. A decrease in rates at Liverpool made minimum weekly time rates after the change 85, 80 and 76 shillings (par, \$20.683, \$19.466, \$18.493; exchange 1920-21, \$15.919, \$14.983, \$14.234) for the different grades of workers. For pieceworkers, "log" rates after the change became:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Grade I Shops .....	1/1	.264	.203
"    II    " .....	1/0½	.253	.195
"    III   " .....	1/0	.243	.187

### France

In collective agreements concluded between employers and employees in the French clothing trades during the first five months of 1920, the following wage rates were specified:

<sup>1</sup>*Labour Gazette.*

<sup>2</sup>These "log" rates are subject to machine deductions, if any.

WEEKLY WAGE RATES FIXED BY COLLECTIVE AGREEMENT IN  
THE FRENCH CLOTHING INDUSTRY, JANUARY TO MAY, 1920<sup>1</sup>

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Paris .....	34.45 to 127.20	6.649 to 24.55	2.387 to 8.815
Lille .....	15.00 <sup>a</sup> " 144.00 <sup>b</sup>	2.895 " 27.79	1.040 " 9.979
Cutters .....	22.50 " 150.00 <sup>c</sup>	4.343 " 28.95	1.559 " 10.395
Roubaix			
Cutters .....	100.00 " 137.50 <sup>c</sup>	19.30 " 26.54	6.93 " 9.529
Apprentices .....	24.00 " 55.20 <sup>d</sup>	4.632 " 10.65	1.663 " 3.825

<sup>a</sup>Apprentices.

<sup>b</sup>Approximate, weekly rates figured from daily rates on basis of 6-day week.

<sup>c</sup>Approximate, weekly rates figured from monthly rates on basis of 4-week month.

<sup>d</sup>Approximate, weekly rates figured from hourly rates on basis of 48-hour week.

Minimum wage rates for a week of 48-hours in the military clothing industry in the Paris region, which were published in detail in the bulletin of the French Ministry of Labor, are given below in somewhat condensed form:<sup>2</sup>

MINIMUM WEEKLY WAGES IN THE MILITARY CLOTHING INDUSTRY IN THE PARIS REGION, EFFECTIVE FROM MARCH 1,  
1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Cutting and lining			
Men .....	98.55 to 144.00	19.02 to 27.79	6.830 to 9.979
Women .....	69.12 " 91.03	13.34 " 17.57	4.790 " 6.308
Apprentices over 17 years .....	40.35 " 80.76	7.788 " 15.587	2.796 " 5.597
Machine work			
Women .....	67.20 " 79.58	12.97 " 15.36	4.657 " 5.515
Apprentices .....	34.44 " 62.64	6.647 " 12.09	2.387 " 4.341
Pressing			
Men .....	114.72 " 127.20	22.14 " 24.55	7.950 " 8.815
Women .....	78.86	15.20	5.458
Apprentices			
Male .....	71.55 " 97.75	13.81 " 18.87	4.958 " 6.774
Female .....	62.64	12.09	4.341
Hand work			
Basters and finish- ers, women.....	54.67 " 67.20	10.55 " 12.97	3.789 " 4.657
Buttonhole makers	72.68	14.03	5.037
Cotton sewers .....	65.90	12.72	4.568
Miscellaneous			
Men .....	95.28 " 127.20	18.39 " 24.55	6.603 " 8.815
Women .....	62.64 " 85.34	12.09 " 16.47	4.341 " 5.914

<sup>1</sup>*Bulletin du Ministère du Travail*, November-December, 1920, pp. 551-555.

<sup>2</sup>*Idem.*, March-April, 1920, p. 154.



Figures for the French men's ready-made clothing industry, which correspond very closely to those in the above table, are given in the British official publication, *Labour Overseas*,<sup>1</sup> as follows:

MINIMUM WEEKLY WAGES IN MEN'S READY-MADE CLOTHING  
INDUSTRY

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Cutters .....	80.75 to 127.20	15.58 to 24.55	5.596 to 8.815
Machinists (women)...	70.10 " 79.60	13.53 " 15.36	4.858 " 5.515
Ready-made clothing workers (women)....	67.20 " 72.70	12.97 " 14.03	4.657 " 5.038
Improvers .....	34.45 " 54.65	6.648 " 10.55	2.387 " 3.789
Pressers .....	71.55 " 127.20	13.81 " 24.55	4.958 " 8.815
Rubber clothing workers	67.20 " 127.20	12.97 " 24.55	4.657 " 8.815

### Germany

The *Reichs-Arbeitsblatt* of November 15, 1920, reported a new grouping of localities and new wage rates for the clothing industry in accordance with the decision of a central board. The wages varied greatly in the different localities; the hourly rate set, for Group I (Berlin), being 6.30 marks (par, \$1.499; exchange 1920-21, \$.118); that for Group IIa (Cologne, Düsseldorf, Saarbrücken) 6 marks (par, \$1.428; exchange 1920-21, \$.113), and for the last group, where living conditions are most favorable, 3.60 marks (par, \$.857; exchange 1920-21, \$.068).

Statistics on the wages of men tailors in 1914 and in October, 1920, prepared by the German Clothing Workers' Union, showed that wages have increased approximately 700% as compared to 1,182% increase in the cost of living.<sup>2</sup> The working day was ten hours in 1914 and eight hours in October, 1920. The hourly rates in the large centers in October, 1920, are given below:<sup>3</sup>

<sup>1</sup>April-June, p. 41.

<sup>2</sup>Calwer Index figure.

<sup>3</sup>International Labour Office. *Daily Intelligence*, February 23, 1921, p. 7.

HOURLY WAGE RATES FOR MEN TAILORS IN CERTAIN LARGE  
CITIES IN GERMANY, OCTOBER, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Berlin .....	6.30	1.499	.118
Breslau .....	5.00	1.190	.094
Dresden .....	5.00	1.190	.094
Essen .....	5.75	1.369	.108
Frankfort on the Main.....	5.75	1.369	.108
Hamburg .....	5.75	1.369	.108
Cologne .....	6.00	1.428	.113
Leipzig .....	5.00	1.190	.094
Munich .....	5.00	1.190	.094
Stuttgart .....	5.00	1.190	.094

The following wage rates for other branches of the clothing industry in various localities are published in the reports of collective agreements in the *Reichs-Arbeitsblatt*:

WAGE RATES IN THE GERMAN CLOTHING INDUSTRY FIXED BY  
COLLECTIVE AGREEMENT, NOVEMBER, 1920 TO MARCH, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Mühlhausen in Thüringen</i> <sup>1</sup>			
Women's custom tailoring			
Responsible jacket, cloak, bodice and coat workers .....	2.75	.655	.052
All other workers and hemmers .....	2.00	.476	.038
Assistants			
Advanced .....	1.45	.345	.021
Beginners .....	1.10	.262	.021
Helpers .....	.90	.214	.017
White sewing			
Seamstresses, after two years' apprenticeship .....	.90 to 2.10	.214 to .500	.017 to .039
Responsible seamstresses .....	2.75	.655	.052
Buttonhole makers...	1.45	.345	.027
Blouse making			
Cutters .....	2.20	.524	.041
Cutters' helpers.....	2.00	.476	.038
Buttonhole makers over 18 years.....	1.80 " 1.90	.429 " .452	.034 " .036

<sup>1</sup>Hourly rate. Women workers only.

WAGE RATES IN THE GERMAN CLOTHING INDUSTRY FIXED BY  
COLLECTIVE AGREEMENT, NOVEMBER, 1920 TO MARCH, 1921  
—Continued

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Mülhausen</i> —Continued			
Umbrella making			
Skilled hand sewers, cutters, machine			
sewers, basters.....	2.20	.524	.041
Slower workers.....	1.90	.452	.036
Helpers over 18 years	1.70	.405	.032
Beginners over 18 years .....	1.50	.357	.028
<i>Stettin</i>			
Men and boys' ready- made clothing, <sup>1</sup>			
Cutters, men			
Initial wage .....	276.50	65.81	5.19
After 6 years.....	330.00	78.54	6.20
Head cutters and cut- who are also buyers	360.00	85.68	6.76
<i>Berlin</i> <sup>2</sup>			
Clothing industry			
Simplest work			
Men .....	750	178.73	14.09
Women .....	690	164.43	12.96
Simple work			
Men .....	840	200.17	15.78
Women .....	780	185.87	14.65
Independent workers			
Men .....	1006.25	239.79	18.90
Women .....	920	219.24	17.28
Responsible workers			
Men .....	1210	288.34	22.72
Women .....	1100	262.13	20.66
Executives			
Men .....	1595	380.09	29.95
Women .....	1430	340.77	26.86
<i>Dessau</i> <sup>3</sup>			
Skilled cloak and jack- et workers, etc. ....	2.60	.620	.049
All other skilled workers .....	2.20	.524	.041
Assistants .....			
Beginners .....	1.50	.357	.028
Advanced .....	1.60 to 1.70	.381 to .405	.030 to .032
Helpers .....	1.20	.286	.023

<sup>1</sup>Weekly rates.

<sup>2</sup>Monthly rates. Married workers 10% additional.

<sup>3</sup>Hourly rates.

## VII

### LEATHER MANUFACTURING

#### Great Britain

##### *Tanning*

Hourly wages in the leather tanning industry in Great Britain, as furnished by the United States Trade Commissioner in London, in a report of February 8, 1921, are given below:<sup>1</sup>

HOURLY WAGES IN LEATHER TANNING INDUSTRY, FEBRUARY, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled			
London .....	1 8	.406	.312
Yorkshire and Lancashier .....	1 7¾	.400	.308
Northamptonshire .....	1 6¾	.380	.293
Unskilled			
London .....	1 4	.324	.250
Yorkshire and Lancashier .....	1 3¾	.310	.246
Northamptonshire .....	1 2½	.294	.226

According to the British *Labour Gazette* of January, 1921, minimum hourly wage rates for buffalo picker makers, tanners and skip makers, in the leather tanning industry for Bradford, Halifax, Retford, Rochdale, Todmorden and district, were as follows:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled .....	1 7	.385	.297
Semi-skilled .....	1 5½	.355	.273
Unskilled .....	1 4	.324	.250

Piece rates are fixed so as to enable a worker to earn 15% above day work rates.<sup>2</sup>

<sup>1</sup>Figures from the Ministry of Labour.

<sup>2</sup>*Labour Gazette*, p. 38.

## Boots and Shoes

In the wholesale boot and shoe manufacturing industry the minimum time rate of wages for the principal classes of skilled workers 23 years of age and upward, by the end of 1920, was 68 shillings (par, \$16.55; exchange 1920-21, \$12.74) per week. Before the war, the corresponding minimum was 30 shillings (par, \$7.30; exchange 1920-21, \$5.62) per week in most districts, though in some districts, it was 28 or 29 shillings (par, \$6.81 or \$7.06; exchange 1920-21, \$5.24 or \$5.43). For men of the same ages in the heel building department and in the show and stock rooms, the minimum in December, 1920 was 65 shillings (par, \$15.82; exchange 1920-21, \$12.17) a week, compared with 27 shillings (par, \$6.57; exchange 1920-21, \$5.06) a week adopted in 1914, to take effect at the beginning of 1915. For women of 20 years or over, employed in the closing and heel-building departments, and stock and show room departments, the minimum rate was 40 shillings (par, \$9.73; exchange 1920-21, \$7.49) a week in December, 1920 compared with 17 shillings or 18 shillings (par, \$4.14 or \$4.38; exchange 1920-21, \$3.18 or \$3.37) adopted in 1914, to take effect January, 1915.<sup>1</sup>

Figures of average weekly wages obtained from the General President of the Boot and Shoe Operatives' Union, are given in a report of the United States Trade Commissioner in London, together with the above figures of minimum rates obtained from the Ministry of Labour.<sup>2</sup> The average weekly wages were as follows:

	Shillings	Dollars	
		Par of Exchange	Exchange 1920-21
Male .....	94 to 97	22.87 to 23.60	17.60 to 18.17
Female .....	50	12.17	9.36

<sup>1</sup>*Labour Gazette*, February, 1921, p. 64.

<sup>2</sup>The report states in a footnote:

"Although 68 shillings and 40 shillings for men and women, respectively, were given as the minimum wage per week in the boot and shoe industry by the Ministry of Labour, a conference with Mr. Richards, General President of the Boot and Shoe Machine Operators' Union, disclosed the fact that first-class operators seldom receive less than 25% above the minimum. The last two figures (94 shillings and 50 shillings) included in this schedule are based on statistics in this office and given verbal approval to me by Mr. Ainsworth in charge of wage statistics in the Ministry of Labour."

## Leather Glove Manufacture

Decreases effective the week ending April 9, 1921 left minimum weekly rates for workers in leather glove manufacturing in Worcester, North Devon, Yeovil and Oxford, as follows:<sup>1</sup>

	Shillings	Dollars	
		Par of Exchange	Exchange 1920-21
Time work			
Skilled men .....	67 6	16.424	12.642
Women 20 years and over <sup>1</sup> .	33 0	8.008	6.160
Piecework basis time rate			
For skilled men <sup>2</sup> .....	79 3¾	19.317	14.852

<sup>1</sup>Weekly rate computed from hourly rate on basis of 44-hour week.

<sup>2</sup>Weekly rate computed from hourly rate on basis of 47-hour week.

## France

According to information furnished by the French National Federation of the Leather and Hide Industry, wage rates as of approximately February 1, 1921 for the leather industry, including shoe-makers, saddlers, glove-makers, and tanners, were as follows:<sup>2</sup>

### HOURLY WAGES IN LEATHER INDUSTRY (SHOE-MAKING, SADDLERY, GLOVE-MAKING, TANNING), FEBRUARY, 1921

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Men			
Skilled			
Paris			
Time work <sup>1</sup> .....	3.00	.579	.208
Piece work .....	3.25 to 5.00	.628 to .965	.225 to .347
Provinces <sup>2</sup>			
Time work <sup>3</sup> .....	2.40	.463	.1662
Piece work .....	2.35 to 4.00	.454 to .772	.163 to .277
Unskilled, deduct from above .....	.25	.0483	.017
Women			
Skilled			
Time work <sup>3</sup> .....	2.25 to 3.00	.434 to .579	.156 to .208
Piece work .....	2.50 to 3.25	.483 to .628	.173 to .225
Unskilled			
Time work .....	1.60 to 2.00	.309 to 3.86	.111 to .139

<sup>1</sup>Minimum.

<sup>2</sup>Approximate; "for the provinces wages average 20% less" than in Paris.

<sup>3</sup>Minimum rates.

<sup>1</sup>*Labour Gazette*, May, 1921, p. 261.

<sup>2</sup>Figures from National Federation of the Leather and Hide Industry, reported by United States Commercial Attaché, Paris, February 3, 1921.



In connection with these figures the report in which they are given states:

The above figures were shown to the president of a French leather company, who stated that he was well acquainted with the Secretary of the National Federation of the Leather and Hide Industry and that the latter was a very reliable and conscientious man and that we could depend upon the figures furnished by him.

### *Tanning*

A report of the United States Trade Commissioner in Paris, dated November 6, 1920, states that skilled tannery workers were paid approximately 2.75 francs (par, \$.531; exchange 1920-21, \$.191) per hour, and that ordinary workmen and helpers received 2.25 francs (par, \$.434; exchange 1920-21, \$.156) per hour.<sup>1</sup>

The president of a French leather company stated that the average wages paid to tanners were from 2.50 to 3.12½ francs (par, \$.483 to \$.603; exchange 1920-21, \$.173 to \$.217) per hour, and to finishers from 3 to 4 francs (par, \$.579 to \$.772; exchange 1920-21, \$.208 to \$.277) per hour; some highly skilled workers in the tanning industry were earning as high as 5 francs (par, \$.965; exchange 1920-21, \$.347) per hour, although these were in the minority.<sup>2</sup>

According to figures given in the published details of the collective agreement, hourly wage rates fixed for tannery workers in one establishment at Lille, in June, 1920, were 2.35 to 2.85 francs (par, \$.454 to \$.550; exchange 1920-21, \$.163 to \$.198).<sup>3</sup>

### *Boots and Shoes*

According to collective agreements published by the French Ministry of Labor, a minimum hourly rate of from 1.00 to 3.50 francs (par, \$.193 to \$.676; exchange 1920-21, \$.069 to \$.243) was fixed for boot and shoe workers at Lille, in April, 1920. At Morestel rates were fixed at from 10 to 15 francs per day, or from 1.25 to 1.87½ francs (par, \$.241 to \$.362; exchange 1920-21, \$.087 to \$.130) per hour, for men, and of from 6 to 10 francs per day, or .75 to 1.25 francs (par, \$.145 to \$.241; exchange 1920-21, \$.052 to \$.087) per hour, for

<sup>1</sup>*Commerce Reports*, January 21, 1921.

<sup>2</sup>United States Commercial Attache, Paris, February 3, 1921.

<sup>3</sup>*Bulletin du Ministère du Travail*, August-October, 1920, p. 430.

women.<sup>1</sup> These rates, of course, apply only to these particular districts, though the rates for Lille are probably fairly representative of the larger cities, and those of Morestel of the smaller places.

### *Glove Manufacture*

The following table gives in condensed form the schedule of minimum piecework rates in the Grenoble glove industry, effective May 12, 1920, reported in the *Commerce Reports* of the United States Bureau of Foreign and Domestic Commerce, April 14, 1921.

MINIMUM PIECE-WORK RATES OF GLOVE-MAKERS AT GRENOBLE, FRANCE, (RATES PER DOZEN), EFFECTIVE FROM MAY, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Sewing .....	6.25 to 10.85	1.206 to 2.094	.433 to .752
Slitting <sup>2</sup> .....	.25 " .30	.0482 " .0579	.017 " .021
Trimming tranks .....	.18	.0347	.012
Assorting <sup>1</sup> .....	.13 " .30	.0251 " .0579	.009 " .021
Embroideries <sup>2</sup> .....	1.10 " 2.70	.212 " .521	.076 " .187
Heavy cable twist silk <sup>3</sup> ....	1.25 " 3.70	.241 " .714	.087 " .256
Fine cable twist silk <sup>2</sup> .....	1.45 " 4.55	.280 " .878	.100 " .315
Laying off .....	.65 " 1.55	.125 " .299	.045 " .107
Hemming pique <sup>2</sup> .....	1.00 " 1.45	.193 " .280	.069 " .100
Cutting <sup>3</sup> .....	13.50	2.606	.936

<sup>1</sup>Rates given per 100 dozen.

<sup>2</sup>Silk furnished by factory.

<sup>3</sup>Average.

### **Germany**

In an investigation of wages in the leather industry in February, 1920, made as part of a general survey of wages by the Federal Statistical office, it was found that time workers received the following hourly wages :<sup>2</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Tanners .....	1.81 to 5.33	.431 to 1.270	.034 to .100
Helpers .....	1.56 " 4.20	.372 " 1.001	.029 " .079
Stitchers (women)...	.55 " 2.99	.131 " .713	.010 " .056

<sup>1</sup>*Bulletin du Ministère du Travail*, August-October, 1920, p. 430.

<sup>2</sup>*Sociale Praxis*, February 16, 1921, p. 168.

It was reported that 47% of the workers were on piece rates, and that the variation in wages with this class of workers was less than with those on time work, as is shown by the following hourly earnings of pieceworkers:<sup>1</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled workers .....	2.26 to 4.88	.539 to 1.163	.042 to .092
Stitchers (women) ..	.77 " 3.21	.183 " .765	.014 " .060

Rates had increased over these figures, however, approximately 50% by the end of 1920.

### *Tanning*

The following wage rates for the leather tanning industry were set by collective agreement in the localities specified between October 20, 1920 and March 15, 1921:

#### HOURLY WAGE RATES IN THE LEATHER AND TANNING INDUSTRY FIXED BY COLLECTIVE AGREEMENT OCTOBER, 1920 TO MARCH, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Mainz, Rounheim on the Main			
Men over 21 years.....	5.15	1.226	.097
Women over 21 years.....	2.60	.619	.049
Hirschberg on the Saale <sup>1</sup>			
Men, competent workers.....	4.95 to 5.05	1.178 to 1.202	.093 to .095
Helpers .....	4.70	1.120	.088
Women .....	3.10 " 3.20	.738 " .762	.058 " .060
Württemberg <sup>2</sup>			
Tanners .....	4.60 " 5.00	1.095 " 1.19	.086 " .094
Helpers over 20, after 1 year	4.40 " 4.80	1.047 " 1.144	.083 " .090
Women over 20 .....	2.50 " 3.00	.595 " 7.14	.047 " .056
Mühlhausen in Thüringen <sup>3</sup>			
Skilled men .....	4.80 " 5.00	1.140 " 1.19	.090 " .094
Helpers .....	4.50 " 4.70	1.071 " 1.120	.085 " .088
Women .....	2.90 " 3.00	.690 " .714	.054 " .056

<sup>1</sup>Workers over 20 years. Piece work rates average 10% higher. Family allowance, 20 marks (par, \$.0476; exchange, 1920-21, \$.0038); one and two children, .30 marks (par, \$.0714; exchange, 1920-21, \$.0056); three and four children, .40 marks (par, \$.095; exchange, 1920-21, \$.0075); five and more children, .50 marks (par, \$.119; exchange 1920-21, \$.0094).

<sup>2</sup>Workers in Stuttgart, .10 to .20 marks (par, \$.0238 to \$.0476; exchange, 1920-21, \$.0019 to \$.0038) per hour additional.

<sup>3</sup>Workers over 20 years.

<sup>1</sup>*Sociale Praxis*, February 16, 1921.

## Boots and Shoes

The following table shows the increase in wage rates as embodied in the terms of the national collective agreements for the boot-making industry over a period of years. A shoemaker of over 21 years, living in a Class I locality (locality in which cost of living is highest), working by the hour, received the following minimum weekly wages on the dates specified:

HIGHEST MINIMUM WEEKLY WAGE RATES FOR ADULT SHOEMAKERS FIXED BY COLLECTIVE AGREEMENT, 1917 TO 1921

Date of wage agreement	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
June 9, 1917 <sup>1</sup> .....	39.64	9.43	.744
April 15, 1918 <sup>2</sup> .....	42.88	10.21	.805
December 7, 1918.....	67.36	16.03	1.265
May 9, 1919.....	79.36	18.89	1.490
November 4, 1919.....	110.92	26.40	2.083
January 23, 1920.....	146.92	34.97	2.759
May 1, 1920.....	235.00	55.93	4.413
October 18, 1920.....	258.00	61.40	4.845
January 21, 1921.....	282.00	67.12	5.296

<sup>1</sup>Military boots.

<sup>2</sup>Civilian shoes.

A shoemaker on piecework would earn, according to the latest agreements, 329 marks (par, \$78.30; exchange 1920-21, \$6.18) a week. The minimum wage per hour was 5 marks (par, \$1.19; exchange 1920-21, \$.094), to which various allowances were to be added, thus bringing the sum to 7.20 marks (par, \$1.714; exchange 1920-21, \$1.135). The wages of the other local classes were in proportion to those mentioned above. It is to be noted that these figures represent minimum wage rates.<sup>1</sup>

<sup>1</sup>*Schumacher Fachblatt*, February 16, 1921, reprinted in Daily Intelligence, International Labor Office, March 17, 1921, p. 8.

## VIII

### SAND, CLAY AND GLASS

#### Great Britain

##### *Pottery*

According to data supplied by the Staffordshire Pottery Manufacturers' Association to the United States Consul at Stoke-on-Trent, costs in the English pottery industry have increased over 1914 figures by the percentages given below:<sup>1</sup>

	Percentage increase over 1914 costs
Labor .....	150 to 180
Fuel .....	200 " 255
Clay .....	160 " 250
Cobalt .....	230 " 566
Flint, Glaze, etc. ....	180 " 330
Crates and Straw .....	230 " 425
Cartage .....	300 " 400
Saggar marl and fire-bricks .....	275 " 290
Plaster .....	200

The British *Labour Gazette*<sup>2</sup> reports an increase of 108½% on basic wage rates in this industry from July, 1914 to the end of 1920, and in some cases increases in the basic rates also.

Figures from the United States Department of Commerce show the following weekly wage rates for the British pottery industry in September, 1920:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Laborers .....	62 6	15.208	11.705
Biscuit and glost placers.....	89 6	21.778	16.762
Saggar makers .....	89 6	21.778	16.762

<sup>1</sup>United States Bureau of Foreign and Domestic Commerce. *Commerce Reports*, February 9, 1921, p. 801.

<sup>2</sup>February, 1921, p. 64.

The new schedule of minimum rates for engravers in the pottery industry, for various districts in England, effective from April 15, 1921, was also the result of a decrease. For journeymen engravers the minimum hourly rate after the change was 10½ pence (par, \$.213; exchange 1920-21, \$.164). This rate was subjected to the addition of a 66⅔% incorporated bonus, plus a bonus of 25% on earnings.<sup>1</sup>

Weekly time rates for workers employed in the brick and roofing tile-making industry of North Staffordshire, as of November 19, 1920, are reported in the *Labour Gazette*,<sup>2</sup> as follows:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Men			
Laborers, 21 years and over.....	75 0a	18.49	14.23
20 years <sup>1</sup> .....	56 0	13.63	10.49
Women, 21 years <sup>1</sup> .....	34 0	8.274	6.37

<sup>1</sup>Minimum rates.

aWeekly rates figured from hourly on basis of 48-hour week.

### Glass

A decrease of about 14% is reported<sup>3</sup> for glass bottle blowers and makers in London, effective January 17, 1921, leaving rates per "day"<sup>4</sup> after the change, for made work, as follows:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Makers .....	7 0	1.703	1.31
Blowers .....	6 0	1.460	1.12

The following wage rates were set for workers in the glass working industry in the Birmingham district, effective from September 1, 1920:<sup>5</sup>

<sup>1</sup>*Labour Gazette*, May, 1921, p. 265.

<sup>2</sup>December, 1920, p. 702.

<sup>3</sup>*Idem.*, February, 1921, p. 97.

<sup>4</sup>A "day" refers to a fixed output, varying in quantity with the article made.

<sup>5</sup>*Labour Gazette*, October, 1920.



WEEKLY WAGE RATES IN THE BIRMINGHAM GLASS WORKING INDUSTRY, EFFECTIVE SEPTEMBER, 1920

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Cutters, silverers, embossers, lead light workers and glaziers .....	79 1	19.243	14.811
Cementers, wetters-off and painters...	69 6	16.911	13.016
Packers .....	72 1	17.540	13.500
Laborers .....	63 5	15.431	11.877

## France

### *Pottery*

In the French pottery industry rates for brick moulders were from 14 to 16 francs (par, \$2.702 to \$3.088; exchange 1920-21, \$.970 to \$1.09) per 1,000 bricks, according to wage data supplied by the manufacturers' association (Société Anonyme l'Union Industrielle). The moulder earns from 25 to 35 francs (par, \$4.825 to \$6.755; exchange 1920-21, \$1.733 to \$2.426) per day. Ordinary labor receives from 1.90 to 2.00 francs (par, \$.367 to \$.386; exchange 1920-21, \$.132 to \$.139) per hour.<sup>1</sup>

In a wage agreement for the pottery industry in Marseilles, June 16, 1920, rates were set at 21 francs (par, \$4.053; exchange 1920-21, \$1.455 per day.<sup>2</sup>

### *Glass*

Wages in the glass industry in Paris, as set by collective agreement May 21, 1920, ranged from 8 francs (par, \$1.544; exchange 1920-21, \$.544) (for children) to 20 francs (par, \$3.86; exchange 1920-21, \$1.386) per day.<sup>3</sup>

### *Marble*

Hourly wage rates for marble cutters as fixed by collective agreement in two localities, in March and June, 1920, were as follows:<sup>4</sup>

<sup>1</sup>Reported by United States Commercial Attache, Paris, Feb. 3, 1921.

<sup>2</sup>*Bulletin du Ministère du Travail*, November-December, 1920, p. 545.

<sup>3</sup>*Idem.*

<sup>4</sup>*Idem.*

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Paris <sup>1</sup> .....	2.90 to 3.45	.560 to .666	.201 to .239
Roubaix .....	2.90	.560	.201

<sup>1</sup>Minimum rates.

## Germany

### Pottery

The industry of fine ceramic products in Germany has a scale of wages covering the whole country. The localities are arranged in four classes, with an extra class for Berlin. The figures represent minimum rates, and good workmen are correspondingly better paid. The agreement from which the following rates were taken was effective from October 1 to December 31, 1920, and was renewed January 1, 1921, with slight changes in the bonuses. The following table gives the range of wage rates in the various localities for workers over 20 years of age:<sup>1</sup>

#### MINIMUM HOURLY WAGE RATES IN THE CERAMICS INDUSTRY, EFFECTIVE FROM OCTOBER 1, 1920<sup>a</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Men			
Expert workers			
Time work .....	2.70 to 4.54	.643 to 1.081	.051 to .085
Job-rate .....	3.65 " 5.68	.869 " 1.352	.069 " .107
Other Workers			
Time work .....	2.33 " 4.03	.555 " .959	.044 " .076
Job-rate .....	3.15 " 5.04	.750 " 1.200	.059 " .095
Women			
Expert workers			
Time work .....	2.18 " 3.26	.519 " .776	.041 " .061
Job-rate .....	2.73 " 4.08	.650 " .971	.051 " .077
Other Workers			
Time work .....	1.92 " 3.01	.457 " .716	.036 " .057
Job-rate .....	2.40 " 3.78	.571 " .900	.045 " .071

<sup>a</sup>Additional payments of 10% to 25% are made according to age, number of children and kind of work.

### Glass

The following hourly wage rates for glass cutting in two localities were fixed in November, 1920:<sup>2</sup>

<sup>1</sup>*Reichs-Arbeitsblatt*, Nov. 15, 1920, p. 99\* and Mar. 15, 1921, p. 420.\*

<sup>2</sup>*Idem.*, December 27, 1920, p. 215.\*

HOURLY WAGE RATES FOR GLASS CUTTERS IN TWO LOCALITIES  
FIXED BY COLLECTIVE AGREEMENT, NOVEMBER, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Chemnitz <sup>1</sup>			
Skilled glass cutters .....	4.35 to 5.90	1.035 to 1.404	.082 to .111
Artists .....	4.20 " 5.50	1.000 " 1.309	.079 " .103
Helpers and other workers..	3.90 " 4.35	.928 " 1.035	.073 " .082
Saxony <sup>2</sup>			
Designers and cutters .....	4.00 " 4.60	.952 " 1.095	.075 " .086

<sup>1</sup>Workers over 20 years. Married workers 10% to 15% additional.

<sup>2</sup>Minimum rates.

*Labour Overseas*, a British official publication, reports a wage rate in the German bottle-making industry of 5 marks per hour (par, \$1.19; exchange 1920-21, \$.094), for skilled time workers in March, 1920.

### Brick Making

The following wage rates for brick making are reported in the *Reichs-Arbeitsblatt*:<sup>1</sup>

HOURLY WAGE RATES IN THE BRICK MAKING INDUSTRY IN TWO  
LOCALITIES FIXED BY COLLECTIVE AGREEMENT, OCTOBER,  
1920 AND JANUARY, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Gera and vicinity			
Men over 25 <sup>1</sup> .....	4.70	1.119	.088
Artisans .....	4.90	1.166	.092
Kiln men .....	5.20	1.238	.098
Brick burners .....	4.40 to 4.70	1.047 to 1.119	.083 to .088
Women over 21 .....	3.20	.762	.060
Görlitz and vicinity <sup>2</sup>			
Men over 20 .....	3.15 " 3.50	.750 " .834	.059 " .066
Women over 18 .....	1.90 " 2.10	.452 " .500	.036 " .039

<sup>1</sup>Includes also married men over 21 years.

<sup>2</sup>Burners, firemen, etc., receive 10% more.

<sup>1</sup>November 26, 1921, p. 138 and February 15, 1921, p. 345.

## IX CHEMICALS

### Great Britain

#### *Alkalies, Heavy Chemicals and Dyes*

Weekly wages in this industry, as reported by the Secretary of the Chemical Employers' Association in February, 1921, were as follows:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Common labor <sup>1</sup> .....	75 6	18.37	14.14
Semi-skilled or process men <sup>2</sup> .....	106 0	25.79	19.85

<sup>1</sup>47-hour week.

<sup>2</sup>56-hour week.

He further stated that the salary of chemists or technically trained men was 300 pounds (par, \$1,459.95; exchange 1920-21, \$1,123.71) or more per year.<sup>1</sup>

According to the *Labour Gazette*, there has been a decrease in the wage rates of workers employed in the manufacture of heavy chemicals, salts, etc., effective from the third pay week in April, 1921. After the change, minimum standard rates for day laborers and shiftmen (able-bodied men 21 years and over) were 1 shilling, 5 pence and 1 shilling, 7 pence (par, \$.345, \$.265; exchange 1920-21, \$.385, \$.297), respectively.

#### *Paint, Color and Varnish*

The following minimum weekly rates were set August 1, 1920, under an agreement arrived at by the Joint Industrial Council for the Paint, Color and Varnish Trade, and were still in effect at the end of 1920:<sup>2</sup>

<sup>1</sup>Report of United States Trade Commissioner, London, February 8, 1921.

<sup>2</sup>Ministry of Labour.

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Men, over 20 years....	56 6 to 68 0 <sup>a</sup>	13.748 to 16.546	10.582 to 12.735
Women, over 18 years.	36 6 " 40 0	8.881 " 9.733	6.836 " 7.491

<sup>a</sup> In the case of qualified youths higher rates up to 4 shillings (par, \$.973; exchange, 1920-21, \$.749) in excess of the minimum may be paid.

### *Drugs and Fine Chemicals*

For workers employed in the drug and fine chemical trade, the following weekly wage rates were set July 1, 1920, and were still in effect at the end of 1920:<sup>1</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Men, 21 years and over.	65 to 75	15.816 to 18.249	12.174 to 14.046
Women, 18 years and over .....	37 6 " 45	9.125 " 10.950	7.023 " 8.428

### *Printing Ink Manufacture*

Minimum weekly rates for men employed in printing ink and roller making, for London, as from February 5, 1921, were reported as follows:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Head oil boilers, head roller makers, etc..	92 6	22.51	17.32
Skilled ink grinders, etc. ....	82 6	20.07	15.45
Asst. ink grinders, asst. oil boilers, etc....	75 0	18.25	14.05
Packers, vanmen, laborers, etc.....	72 6	17.64	13.58

In the provinces the rates are 10% less than the rates for London.<sup>2</sup>

### *Soap and Candle Manufacture*

For workers employed in soap and candle manufacture, the following rates became effective as the result of a decrease in April, 1921:<sup>3</sup>

<sup>1</sup>Ministry of Labour.

<sup>2</sup>*Labour Gazette*, April, 1921, p. 208.

<sup>3</sup>*Idem.*, May, 1921, p. 265.

MINIMUM WEEKLY WAGE RATES IN SOAP AND CANDLE MANUFACTURE, APRIL, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Larger industrial centers			
Men, 21 years and over .....	69 0	16.789	12.923
Women, 18 years and over.....	39 6	9.611	7.398
Port Sunlight and Bromborough Pool			
Men .....	76 0	18.493	14.234
Women .....	42 0	10.220	7.866
Other centers			
Men .....	67 0	16.303	12.548
Women .....	36 0	8.760	6.742

### France

#### *Electro-Metallurgical and Electro-Chemical Industries*

Wages of common labor in the electro-metallurgical and electro-chemical industries in Paris were 1.87 to 3.12 francs (par, \$.361 to \$.602; exchange 1920-21, \$.130 to \$.216) per hour, as of approximately February 1, 1921, according to information furnished by the Employers' Association of the Metallurgical and Mining Industries and the General Federation of Labor.

#### *General Chemical Industry*

According to the Employers' Association of Metallurgical and Mining Industries, as reported by the United States Commercial Attaché in February, 1921, common labor in this industry received 19 francs per day, or 2.375 francs (par, \$.458; exchange 1920-21, \$.165) per hour, as per contract between the association and the employees. The report stated that especially skilled or experienced labor received 25 francs (par, \$.4825; exchange 1920-21, \$.1733) per day, but that the great majority of employees in this industry were common laborers.

A Swiss report states that wages of factory workers in the French chemical industry at the end of 1920, were 2.70 francs (par, \$.521; exchange 1920-21, \$.187) per hour.<sup>1</sup>

#### *Dye Manufacturing*

Minimum hourly wages in the dye making industry at Lille were fixed by collective agreement March 20, 1920, at 1.25 to 2.25 francs (par, \$.241 to \$.434; exchange 1920-21, \$.087 to

<sup>1</sup>L'Union Centrale des Associations patronales suisses. Bulletin No. 9, p. 11.



\$.156) per hour. Apprentices were to receive 6 francs (par, \$1.158; exchange 1920-21, \$.416) per day and boys less than 18 years of age 11 francs (par, \$2.123; exchange 1920-21, \$.762) per day.<sup>1</sup>

## Germany

Wage rates in the German chemical industry incorporated in collective agreements from various localities published in the *Reichs-Arbeitsblatt* are given below. Ranges of rates are shown for workers of varying ages and varying degrees of skill:

### HOURLY WAGE RATES IN THE GERMAN CHEMICAL INDUSTRY FIXED BY COLLECTIVE AGREEMENT, OCTOBER, 1920 TO FEBRUARY, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Cologne and vicinity</i> <sup>1</sup>			
Experienced workers over 20	4.71 to 6.30	1.121 to 1.500	.088 to .118
Experienced helpers, including machine workers.....	4.34 " 5.80	1.033 " 1.380	.082 " .109
Women over 18 .....	2.44 " 3.21	.581 " .764	.046 " .060
Stokers, machinists, etc.....	4.49 " 6.00	1.069 " 1.428	.084 " .113
<i>Hemelingen</i>			
Men over 20 .....	5.00	1.19	.094
Women over 20 .....	3.05	.726	.057
<i>Bavaria (right of Rhine)</i> <sup>2</sup>			
Workers over 21			
Initial wage .....	4.00 " 4.90	.952 " 1.166	.075 " .092
After 2 years .....	4.20 " 5.10	1.000 " 1.214	.079 " .096
Women over 18			
Initial wage .....	2.30 " 2.80	.547 " .666	.043 " .053
After 2 years .....	2.50 " 3.00	.595 " .714	.047 " .056
Artisans, machinists, etc., over 21 .....	4.30 " 5.70	1.023 " 1.357	.081 " .107
<i>Mannheim, Ludwigshafen and vicinity</i> <sup>3</sup>			
Craftsmen over 21 .....	4.20 " 6.80	1.00 " 1.618	.079 " .128
Stokers, machinists and helpers over 21 .....	4.15 " 6.70	.988 " 1.595	.078 " .126
Factory workers over 21...	4.10 " 6.40	.976 " 1.525	.077 " .120
Women over 20 .....	2.45 " 3.90	.583 " .928	.046 " .073
<i>Pomerania</i> <sup>4</sup>			
Unskilled workers .....	3.75 " 4.50	.893 " 1.071	.070 " .085
Women .....	1.90 " 2.60	.452 " .619	.036 " .049

<sup>1</sup>Chemicals and explosivess; maximum average wage.

<sup>2</sup>Range of wages according to locality. Family allowance: wife and each child, 6 marks (par, \$1.428; exchange, 1920-21, \$.113) per week.

<sup>3</sup>Family allowance: 8 to 14 marks (par, \$1.906 to \$3.336; exchange, 1920-21, \$.150 to \$.263) per week per child.

<sup>4</sup>Workers over 20 years.

<sup>1</sup>*Bulletin du Ministère du Travail*, November-December, 1910, p. 546.

A Swiss report states that factory workers in the German chemical industry at the end of 1920 received 4.80 marks (par, \$1.144; exchange 1920-21, \$.090) per hour.<sup>1</sup>

### *Dyeing*

In the zone occupied by British troops (Cologne district), hourly wages in the dyeing industry, in August, 1920, were as follows:<sup>2</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Men			
Skilled .....	6.10	1.452	.115
Semi-skilled .....	5.65	1.345	.106
Unskilled .....	5.25	1.250	.099
Women, unskilled ...	3.00 to 3.25	.714 to .774	.056 to .061

Since this time, however, wages have probably increased somewhat.

### *Soap Making*

According to a wage agreement effective February 11, 1921, workers in the soap industry in the Cologne district received 5.85 marks (par, \$1.392; exchange 1920-21, \$.110) per hour. Married men received .25 marks (par, \$.0595; exchange 1920-21, \$.0047) per hour additional.<sup>3</sup>

<sup>1</sup>L'Union Centrale des Associations patronales suisses. Bulletin No. 9, p. 11.

<sup>2</sup>*Labour Overseas*, July to September, 1920, p. 135.

<sup>3</sup>*Reichs-Arbeitsblatt*, March 31, 1921, p. 454.\*

# X

## PAPER, PRINTING AND BOOKBINDING

### Great Britain

#### *Printing and Bookbinding*

The official figures of average (unweighted) weekly time rates of wages in 27 towns in Great Britain, in December, 1920, are given below:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Hand compositors (book and jobbing work) .....	93 4	22.71	17.48
Bookbinders and machine rulers..	93 8	22.78	17.54

These rates represent at 162% and a 176% increase, respectively, over July, 1914 rates.<sup>1</sup> The following tabulation of the range of minimum weekly wage rates in the printing trades in six grades of cities in England, is compiled from the *Labour Gazette* of December, 1920. These rates were effective from November 15, 1920, and there was no notice of changes in wages in this trade up to April 30, 1921.

#### MINIMUM WEEKLY WAGE RATES IN THE PRINTING TRADES IN VARIOUS CLASSES OF CITIES IN ENGLAND, NOVEMBER, 1920

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Compositors and bookbinders, jobbing .....	82 6 to 97 6	20.07 to 23.72	15.45 to 18.26
Compositors:			
Morning newspapers ...	94 6 " 109 6	22.90 " 26.64	17.70 " 20.51
Evening newspapers ...	85 0 " 100 0	20.68 " 24.33	15.92 " 18.73
Linotype operators, jobbing	88 6 " 106 0	21.53 " 25.79	16.57 " 19.85
Linotype operators and rotary minders:			
Morning newspapers ...	101 6 " 119 0	24.70 " 28.96	19.01 " 22.29
Evening newspapers ...	90 0 " 108 6	22.14 " 26.40	17.04 " 20.32

<sup>1</sup>*Labour Gazette*, February, 1921, p. 64.

MINIMUM WEEKLY WAGE RATES IN THE PRINTING TRADES IN  
VARIOUS CLASSES OF CITIES IN ENGLAND, NOVEMBER, 1920

—Continued

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Lithographic printers:			
Machine minders and transferers, flat bed <sup>1</sup> ..	92 6 to 97 6	22.51 to 23.72	17.32 to 18.26
Plate transferers, rotary machines <sup>1</sup> .....	97 6 " 102 6	23.72 " 24.94	18.26 " 19.20
Machine minders, director or off-set rotary <sup>1</sup> ..	102 6 " 107 6	24.94 " 26.16	19.20 " 20.13
Stone polishers and shifters .....	72 6	17.64	13.58
Stone and plate grainers	74 6	18.13	13.95
Lithographic artists:			
Designers and engravers (excluding process workers) <sup>1</sup> .....	95 0 " 100 0	23.12 " 24.33	17.79 " 18.73
Electrotypers and stereotypers:			
Jobbing offices .....	82 6 " 97 6	20.07 " 23.72	15.45 " 18.26
Morning newspapers ...	94 6 " 109 6	22.99 " 26.64	17.70 " 20.51
Evening newspapers ...	85 0 " 100 0	20.68 " 24.33	15.92 " 18.73

<sup>1</sup>From 3 grades of cities only.

Minimum weekly wage rates in the printing trades in London, effective November 15, 1920, were as follows:<sup>1</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Bookbinders and machine rulers:			
Men .....	100 0	24.33	18.73
Women over 18 (skilled)	51 0	12.41	9.55
Electrotypers and stereotypers:			
Daily and Sunday newspapers .....	130 0	31.63	24.35
Casual men <sup>1</sup> .....	26 7	6.468	4.98

<sup>1</sup>Per day.

### *Paper Bag and Box Making*

In the December, 1920 number of the *Labour Gazette*<sup>2</sup> are given the following minimum weekly wage rates in the paper box and paper bag making industries in Great Britain.

<sup>1</sup>*Labour Gazette*, December, 1920, p. 700.

<sup>2</sup>P. 700.

MINIMUM WEEKLY WAGE RATES IN PAPER BOX AND BAG  
INDUSTRY, 1920

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Paper box making			
Machine winders, die makers, form setters, cutters, and head stock keepers			
20 years and over .....	48 6 to 78 6	11.80 to 18.61	9.08 to 14.33
Women (other than learn- ers) <sup>1</sup> .....	37 0	9.003	6.93
Paper-bag making			
Men, over 20 years			
Machine tacklers .....	58 0 " 82 0	14.11 " 19.95	10.86 " 15.36
Paper-bag cutters .....	57 0 " 74 0	13.87 " 18.01	10.68 " 13.86
Women (other than learners) <sup>1</sup> .....	37 0	9.003	6.93

<sup>1</sup>Weekly rate figured from hourly rate on basis of 48-hour week.

### *Paper Making*

Minimum hourly wage rates in paper mills in the United Kingdom (except for skilled tradesmen and those employed in handmade paper mills and board-mills), effective August, 1920, were reported as follows:<sup>1</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Time workers			
Men, 21 years and over			
Class I occupations			
Coating mills .....	1 10	.446	.343
Other mills .....	2 0	.487	.375
Class II occupations			
Day workers .....	1 7¼	.390	.300
Shift workers .....	1 9	.426	.328
Women, 18 years and over .....	10½	.213	.164

For pieceworkers, rates were fixed to yield not less than 20% over timeworkers.

<sup>1</sup>*Labour Gazette*, September, 1920, p. 508.

## France

### *Printing and Bookbinding*

An analysis of ten collective agreements concluded in the first eight months of 1920 and reported in the bulletin of the Ministry of Labour, shows wages for skilled workers ranging from 2 francs (minimum rate) to 2.85 francs (par, \$.386 to \$.550; exchange 1920-21, \$.139 to \$.198) per hour for skilled workers. The highest wage was reported for Clermont-Ferrand. In the case of certain of the larger cities, including Paris, no actual wage rates were stated, but notice was given of increases in cost of living bonuses. The hourly wage rates reported in the various agreements were as follows. The lowest rates shown were for boys and women workers:<sup>1</sup>

DAILY WAGE RATES IN THE FRENCH PRINTING TRADES FIXED BY  
COLLECTIVE AGREEMENT BETWEEN JANUARY AND AUGUST,  
1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Cognac .....	5.15 to 16.90	.994 to 3.262	.357 to 1.171
Montpellier .....	6.00 " 17.00	1.158 " 3.281	.416 " 1.178
Voiron <sup>1</sup> .....	13.00 " 21.00	2.509 " 4.053	.901 " 1.455
Orleans .....	14.40 " 18.40	2.779 " 3.551	.998 " 1.275
Young workers .....	3.40 " 14.40	.656 " 2.779	.236 " .998
Book stitchers .....	10.30	1.988	.714
Angers <sup>1, 2</sup> .....	8.00 " 16.00	1.544 " 3.088	.544 " 1.109
Clermont-Ferrand .....	18.00 " 22.00	3.474 " 4.246	1.247 " 1.525
Méru <sup>2</sup> .....	21.20	4.092	1.469
Toulon			
Day .....	17.00 " 18.00	3.281 " 3.474	1.178 " 1.247
Night .....	17.00 " 20.00	3.281 " 3.860	1.178 " 1.386
Avignon .....	15.90 " 16.90	3.069 " 3.262	1.102 " 1.171
Loitiers <sup>1, 2</sup> .....	8.00 <sup>a</sup> 19.60	1.544 " 3.783	.554 " 1.358

<sup>1</sup>Minimum rate.

<sup>2</sup>Computed from hourly rate on basis of 8-hour day.

<sup>a</sup>Apprentices.

In an agreement concluded at Lille, January 19, 1921, minimum daily wages for workers over 21 years of age were set as follows:

<sup>1</sup>*Bulletin du Ministère du Travail*, November-December, 1920, p. 543 to 545.

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Non-specialized workers' .....	16.00	3.088	1.109
Qualified workers .....	18.00	3.474	1.247
Specialized workers .....	20.00	3.86	1.386
Cost of living bonus			
Workers over 21 years.....	5.00	.965	.347
Workers from 16 to 21.....	3.50	.676	.243

As a result of the decrease in cost of living, wages in the Paris bookbinding and printing trades were reduced, May 16, 1921, a maximum amount of 2 francs (par \$.386; exchange 1920-21, \$.139) a day for men over 18 years of age and 1.20 francs (par \$.232; exchange 1920-21, \$.083) for women over 18 years of age. In Lyon, the cost of living bonus was reduced from 3.85 francs to 3.40 francs (par \$.743 to \$.656; exchange 1920-21, 0.267 to \$.236) per day, effective May 1, 1921.<sup>1</sup>

### *Paper Box Making*

In an agreement dated September 29, 1920, effective to October 15, 1921, the minimum hourly wages for workers in the boxboard and paper box industry in Paris were fixed as follows:

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Men .....	2.40 to 3.50	.463 to .676	.166 to .243
Women .....	1.50 " 2.40	.290 " .463	.104 " .166
Apprentices .....	.25 " 1.90	.0483 " .367	.017 " .132

## Germany

### *Paper*

The following hourly wage rates in the paper industry in Württemberg, varying according to locality, were fixed by collective agreement in October, 1920. In addition, married men were to receive .15 to .20 marks (par \$.0357 to \$.0476; exchange 1920-21, \$.0028 to \$.0038) per hour and also .20 to .25 marks (par \$.0476 to \$.060; exchange 1920-21 \$.0038 to \$.0047) for one child, or .25 to .30 marks (par \$.060 to \$.071; exchange 1920-21, \$.0047 to \$.0056) for two or more children.<sup>2</sup>

<sup>1</sup>*L'Information Sociale*, May 22, 1921, p. 3.

<sup>2</sup>*Reichs-Arbeitsblatt*, November 26, 1920, p. 139.\*



HOURLY WAGE RATES IN WÜRTTEMBERG PAPER INDUSTRY,  
OCTOBER, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Machine tenders .....	4.15 to 4.35	.988 to 1.035	.078 to .082
Rag engine millers .....	4.05 " 4.35	.964 " 1.035	.076 " .082
Machine helpers over 21 years..	3.60 " 4.15	.857 " .988	.068 " .078
Machinists, artisans, etc.....	3.90 " 4.55	.928 " 1.083	.073 " .085
Unskilled women over 20 years	2.25 " 2.55	.536 " .607	.042 " .048

For the paper, pulp wood and cellulose industry in Hanover, a wage agreement dated February 8, 1921 increased the wage rates which were being paid under an agreement of December 1, 1920. The following hourly rates, in force from February 1, 1921, varied according to locality.<sup>1</sup> In addition to these wages, the heads of households were to receive an allowance of 7 marks (par \$1.666; exchange 1920-21, \$.131) per week for each person whom they were supporting.

HOURLY WAGE RATES IN HANOVER PAPER, PULP WOOD AND  
CELLULOSE INDUSTRY, FEBRUARY, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled workers in paper manufacturing .....	4.15 to 5.75	.988 to 1.369	.078 to .108
Unskilled workers over 21..	4.15 " 5.25	.988 " 1.250	.078 " .099
Artisans over 21.....	4.55 " 5.55	1.083 " 1.321	.085 " .104
Trained women over 21.....	2.60 " 3.15	.619 " .750	.049 " .059

### *Printing*

The weekly wage for printers in the zone occupied by British troops (Cologne district) in August, 1920 were as follows:<sup>2</sup>

WEEKLY WAGES OF PRINTERS IN ZONE OCCUPIED BY BRITISH  
TROOPS, AUGUST, 1920

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled men			
Single .....	242.20	57.64	4.55
Married .....	256.95	61.15	4.83
Unskilled men			
Single .....	206 to 210	49.03 to 49.98	3.87 to 3.94
Married .....	228 " 230	54.26 " 54.74	4.28 " 4.32
Unskilled women .....	130 " 140	30.94 " 33.32	2.44 " 2.63

<sup>1</sup>*Idem.*, March 31, 1921, p. 455.\*

<sup>2</sup>*Labour Overseas*, July-September, 1920, p. 135.

The minimum weekly wage rates of German lithographers, fixed in June, 1920, for one year, was from 108 to 180 marks (par \$25.70 to \$42.84, exchange 1920-21, \$2.03 to \$3.38). To this was added a cost of living bonus of from 21 to 40 marks (par \$5.00 to \$9.52; exchange 1920-21, \$.394 to \$.751).<sup>1</sup>

A Swiss report states that wages of factory workers in the German paper industry at the end of 1920 were from 2.20 to 4.65 marks (par \$.524 to \$1.108; exchange 1920-21, \$.041 to \$.087) per hour:<sup>2</sup>

<sup>1</sup>*Labour Overseas, April-June, 1920*, p. 42.

<sup>2</sup>L'Union Centrale des Associations patronales suisses. Bulletin No. 9, p. 11.

# XI

## WOODWORKING

### Great Britain

According to the official figures in the British *Labour Gazette*, the average (unweighted) weekly time rates of wages in 17 large towns for workmen in the furniture making industry, as of December 31, 1920 were as follows:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Cabinet makers .....	102 1	24.84	19.12
Upholsters .....	101 1	24.60	18.93
French polishers .....	101 11	24.80	19.09

These rates showed an increase over rates in effect July, 1914, of approximately 157%, 161% and 175%, respectively, for the three occupations given. Hours of labor, however, were 44 to 47 in 1920 as compared with 49½ to 54 in 1914.

The following hourly rates for the trades and locations specified were reported<sup>1</sup> as the results of changes from July, 1920 to January, 1921:

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Packing case making			
Oldham .....	2 1	.507	.390
Saw milling			
Carlisle .....	1 11	.466	.359
Certain towns in West Riding of Yorkshire .....	2 2	.527	.406
Saw mill laborers			
Tyne district .....	1 11	.466	.359

<sup>1</sup>*Labour Gazette*, May, 1921, p. 265.

For men employed in the vehicle building and wheelwright trades by members of the National Employers' Association of Vehicle Builders in England and Wales, there was a decrease in rates beginning the first pay day after April 9, 1921. Minimum rates after the change were as follows:<sup>1</sup>

MINIMUM HOURLY RATES IN THE VEHICLE BUILDING INDUSTRY  
IN CERTAIN TOWNS, APRIL, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Bodymakers, wheelrights, coach joiners and finishers, smiths, painters, trimmers, mounters, etc. ....	1 7 to 2 0	.385 to .487	.297 to .375
Coach fitters .....	1 7 " 1 10½	.385 " .456	.297 " .351
Vicemen .....	1 5 " 1 6½	.345 " .375	.265 " .289
Hammermen and brush hands.	1 4 " 1 4½	.324 " .335	.250 " .258

<sup>a</sup> Except London.

For London the rates are as follows:<sup>2</sup>

MINIMUM HOURLY RATES IN VEHICLE BUILDING INDUSTRY IN  
LONDON, APRIL, 1921<sup>a</sup>

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Spindlehands and leading hands.....	2 1	.507	.390
Mounters, coach fitters and sawyers..	1 11	.466	.359
Other skilled men .....	2 0	.487	.375
Vicemen .....	1 7	.385	.297
Hammermen and brush hands.....	1 5½	.355	.273
Laborers .....	1 3½	.314	.242

<sup>a</sup>Rates up to 4 pence (par, \$.081; exchange 1920-21; \$.062) in excess of minimum rates are paid to skilled men.

Maximum rates were defined for Liverpool, Manchester, Oldham and Stockport, 2 shillings, 4 pence (par, \$.566; exchange 1920-21, \$.437) per hour for Liverpool, and 2 shillings, 3 pence for the three other towns, (par, \$.547; exchange 1920-21, \$.421).<sup>3</sup>

<sup>1</sup>Labour Gazette, May, 1921, p. 264.

<sup>2</sup>Idem., p. 264.

## France

Wages in the various branches of the French wood-working industry, as fixed in the collective agreements between January and July, 1920, and published by the Ministry of Labour, are tabulated below. Wages for skilled labor, where definitely stated, varied for the different trades and in the different localities from 2.25 francs (par, \$.434; exchange 1920-21, \$.156) per hour minimum rate to 3.15 francs (par, \$.608; exchange 1920-21, \$.218) per hour.<sup>1</sup>

### HOURLY WAGES IN WOODWORKING TRADES IN VARIOUS LOCALITIES FIXED BY COLLECTIVE AGREEMENT, JANUARY TO JULY, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Joiners and carpenters			
Toulouse <sup>1</sup> .....	2.50	.483	.173
St. Étienne			
Carpenters .....	2.50 to 2.75	.483 to .531	.173 to .191
Joiners .....	1.90 " 2.50	.367 " .483	.132 " .173
Thiers <sup>1</sup> .....	2.25	.434	.156
Rouen <sup>1</sup> .....	2.25	.434	.156
Furniture making			
Pont-de-Beauvoisin .....	1.25 " 2.30	.241 " .444	.087 " .159
St. Étienne <sup>1</sup> .....	2.25	.434	.156
Le Havre			
Men .....	3.00	.579	.208
Women .....	1.50	.290	.104
Halluin			
Chair makers .....	2.00 " 2.85	.386 " .550	.139 " .198
Bordeaux			
Cabinet makers <sup>1</sup> , <sup>2</sup> .....	2.87	.554	.199
Coach makers			
Morlaix <sup>2</sup> .....	1.25 " 2.38	.241 " .459	.087 " .165
Lille <sup>1</sup> .....	2.15 " 2.85	.415 " .550	.149 " .198
Rouen .....	1.25 " 3.15	.241 " .608	.087 " .218

<sup>1</sup>Minimum.

<sup>2</sup>Reduced from daily rate on basis of 8-hour day.

<sup>1</sup>*Bulletin du Ministère du Travail.* August-October, 1920, p. 428, 30.

## Germany

In the zone occupied by British troops (Cologne district) the following hourly wages were in effect for the woodworking industry in August, 1920:

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Skilled .....	6.50	1.547	.122
Unskilled .....	5.80	1.381	.109
Youths .....	.70 to 1.40	.167 to .333	.013 to .026

The wages set by collective agreements in the German wood-working industry in various localities from November, 1920 to March, 1921, are given below :<sup>1</sup>

### HOURLY WAGE RATES IN THE WOODWORKING INDUSTRY IN SPECIFIED DISTRICTS, NOVEMBER, 1920 TO MARCH, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Bremerhaven and vicinity</i> <sup>1</sup>			
Joiners and turners, over 23 years .....	5.85	1.392	.110
Experienced machine workers .....	5.65	1.345	.106
Experienced women .....	3.65	.914	.072
Unskilled workers and helpers .....	5.55	1.321	.104
Unskilled women .....	3.20	.762	.060
<i>Bremen</i> <sup>2</sup>			
Men			
Skilled .....	6.10	1.452	.115
Helpers .....	5.60	1.333	.105
Women			
Skilled .....	4.10	.976	.077
Helpers .....	3.40	.809	.064
<i>Hamburg and vicinity</i> <sup>2</sup>			
Skilled			
Men .....	6.30	1.499	.118
Women .....	4.80	1.145	.090
Trained helpers			
Men .....	5.50	1.309	.103
Women .....	4.15	.988	.078
Unskilled helpers .....	5.40	1.285	.101

<sup>1</sup>Workers over 20 years of age.

<sup>2</sup>Workers over 22 years.

<sup>1</sup>*Reichs-Arbeitsblatt*, November 1, 1920, to April 15, 1921.

HOURLY WAGE RATES IN THE WOODWORKING INDUSTRY IN  
SPECIFIED DISTRICTS, NOVEMBER, 1920 TO MARCH, 1921—

*Continued*

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Lower Weser</i> <sup>1</sup>			
Joiners and turners, over 23 years <sup>2</sup> .....	6.35	1.511	.119
Machine workers .....	6.15	1.464	.115
Trained women .....	4.10	1.976	.077
Unskilled men and helpers	6.05	1.440	.114
Unskilled women .....	3.45	.822	.065
<i>Bavaria</i> <sup>3</sup>			
(Sawmills)			
Skilled workers and saw- yers and power machine workers, over 21.....	3.20 to 5.10	.762 to 1.213	.060 to .096
Helpers with heavy or re- sponsible work, over 21.	3.10 " 4.95	.738 " 1.178	.058 " .093
Other helpers, over 21...	3.00 " 4.80	.714 " 1.143	.056 " .090
Women, over 18.....	1.95 " 3.25	.464 " .4774	.037 " .061
<i>Magdeburg</i> <sup>4</sup>			
(Box making)			
Craftsmen .....	4.40 " 4.70	1.047 " 1.119	.083 " .088
Helpers .....	4.00 " 4.30	.952 " 1.023	.075 " .081
<i>Franken-tha</i> <sup>5</sup>			
(Coopers)			
Craftsmen .....	6.00 " 6.50	1.428 " 1.547	.113 " .122
Helpers .....	5.00 " 5.50	1.190 " 1.309	.094 " .103
<i>Alt-damm</i> <sup>6</sup>			
(Coopers)			
Craftsmen .....	4.25	1.012	.080
Other workers .....	4.00	.952	.075
Women .....	2.10	.500	.039
<i>Hamburg</i>			
(Cigar box manufacturing)			
Trained and machine workers .....	6.50	1.547	.122
Other workers over 18....	4.40	1.047	.083
Women over 18 .....	3.60	.857	.068
<i>Bremen</i> <sup>4</sup>			
(Cigar box manufacturing)			
Men			
Skilled .....	5.60 " 5.80	1.333 " 1.380	.105 " .109
Semi-skilled .....	5.40 " 5.60	1.285 " 1.333	.101 " .105
Unskilled .....	5.20 " 5.40	1.238 " 1.285	.098 " .101
Women .....	3.10 " 3.20	.738 " .762	.058 " .060

<sup>1</sup>Workers over 20 years.

<sup>2</sup>Under 23 years 10% less.

<sup>3</sup>Married men. 15 mark (par, \$.0357; exchange, 1920-21, \$.0028) per hour additional.

<sup>4</sup>Workmen over 30 years.

<sup>5</sup>Workmen over 21 years.

<sup>6</sup>Workmen over 22 years. To this is added a bonus of 6 marks (par, \$1.428; exchange, 1920-21, \$.113) per week for married men, and for wife and child under 14, and of 5 marks (par, \$1.190; exchange, 1920-21, \$.094) weekly for single men.



## XII

### BAKING AND CONFECTIONERY

#### Great Britain

At the end of 1920 the average of recognized weekly wage rates for table hands in the baking trade in 27 large towns was 83 shillings, 3 pence (par, \$20.26; exchange 1920-21, \$15.59) as contrasted with 30 shillings, 3 pence (par, \$7.360; exchange 1920-21, \$5.665) in July, 1914; an increase of about 176%. Hours of work were 48 in December, 1920 as compared with 48 to 60 in 1914.<sup>1</sup>

Weekly rates in the various occupational groups in the baking and confectionary trades in various towns in England, as the result of changes from October to December, 1920 are given below:<sup>2</sup>

WEEKLY WAGE RATES FOR VARIOUS OCCUPATIONS IN THE BAKING  
AND CONFECTIONERY TRADE, OCTOBER TO DECEMBER, 1920

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Single hands .....	84 0	20.44	15.73
Forehands .....	84 0 to 100 0	20.44 to 24.33	15.73 to 18.73
Second hands .....	77 0 " 95 0	18.74 " 23.12	14.42 " 17.79
Table hands .....	72 0 " 94 0	17.52 " 22.87	13.48 " 17.60

For workmen in London employed in the bread baking and confectionery trades by members of the Incorporated Society of Principal Wholesale and Retail Bakers, Ltd., and by co-operative Societies, there were two decreases in April, which resulted in the establishment of the following rates for adult male workers:

<sup>1</sup>*Labour Gazette*, February, 1921, p. 64.

<sup>2</sup>*Idem.*, January, 1921, p. 37; February, 1921, p. 98.

MINIMUM WEEKLY RATES IN LONDON IN THE BAKING AND  
CONFECTIONERY TRADES, EFFECTIVE APRIL, 1921

	Shillings and Pence	Dollars	
		Par of Exchange	Exchange 1920-21
Forehands .....	80 6 to 88 6	19.588 to 21.534	15.076 to 16.575
Single hands .....	76 6	18.614	14.327
Second hands and doughmakers .....	74 6 " 80 6	18.128 " 19.588	13.953 " 15.076
Ovensmen, machine mindes, etc. ....	75 6	18.371	14.140
Tablehands .....	72 6	17.641	13.578

### France

The United States Trade Commissioner in Paris, November 6, 1920, reported that the daily wages of French bakers were 16 francs (par, \$3.088; exchange 1920-21, \$1.109) in 1920.

According to figures reported by the United States Consul at Lyon, average daily wages of bakers in this city in 1920 were as follows:<sup>1</sup>

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Bakers, 1st class .....	21	4.053	1.455
Bakers, 2nd class .....	18	3.474	1.247

With an eight-hour day, average hourly wages in 1920 in Lyon would be 2.25 francs (par \$.434; exchange 1920-21, \$.156) and 2.62½ francs (par \$.5066; exchange 1920-21, \$.182), respectively, for the two classes of labor given above.

These rates agree approximately with the figures in the wage agreements published in the Bulletin of the French Ministry of Labor. The wage rates fixed by the collective agreements in a number of cities are tabulated below:<sup>2</sup>

<sup>1</sup>United States. Bureau of Labor Statistics. *Monthly Labor Review*, October, 1920, p. 133.

<sup>2</sup>*Bulletin du Ministère du Travail*, August to October, 1920, p. 425-6.

DAILY WAGE RATES IN THE BAKING TRADES IN SPECIFIED  
LOCALITIES FIXED BY COLLECTIVE AGREEMENT, FEBRUARY TO  
JUNE, 1920

	Francs	Dollars	
		Par of Exchange	Exchange 1920-21
Toulouse <sup>1</sup> .....	18.00	3.474	1.247
Nancy .....	15.00	2.895	1.040
Lille <sup>2</sup> .....	18.33 to 20.00	3.538 to 3.860	1.270 to 1.386
Lyon .....	16.00 " 21.00	3.088 " 4.053	1.109 " 1.455
Chatellerault .....	16.00	3.088	1.109
Limoges .....	19.25 " 20.25	3.715 " 3.908	1.334 " 1.403

<sup>1</sup>For each 150 kilograms (330.7 lb.) of flour kneaded.

<sup>2</sup>Reduced from weekly rate on basis of six-hour week. Minimum rate.

### Germany

According to figures in *Labour Overseas*,<sup>1</sup> the weekly wages of bakers in Berlin in May, 1920, were 255 to 265 marks (par, \$60.77 to \$63.15; exchange 1920-21, \$4.79 to \$4.98) per week for men, and 155 marks (par, \$36.94; exchange 1920-21, \$2.91) for women. Wages had increased considerably, however, between this date and the end of 1920.

The following hourly rates for Berlin chocolate and sweet-meat establishments in December, 1920 were reported in the *Reichs-Arbeitsblatt*.<sup>2</sup>

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
Experts over 20 years .....	5.25 to 5.62	1.251 to 1.339	.099 to .106
Assistants over 20 years .....	5.00 " 5.31	1.192 " 1.265	.094 " .100
Women over 18 .....	2.62 " 2.94	.624 " .701	.049 " .055

<sup>1</sup>April-June, 1920, p. 43.

<sup>2</sup>November 15, 1920, p. 99.

Weekly wage rates set by collective agreements in localities of various sizes, between October, 1920 and January, 1921, were as follows:<sup>1</sup>

WEEKLY WAGE RATES IN THE BAKING TRADE IN SPECIFIED  
LOCALITIES FIXED BY COLLECTIVE AGREEMENT BETWEEN  
OCTOBER, 1920 AND JANUARY, 1921

	Marks	Dollars	
		Par of Exchange	Exchange 1920-21
<i>Amberg</i>			
Helpers			
1st year .....	170	40.51	3.19
After 1st year .....	175	41.70	3.29
Responsible Helpers .....	180	42.89	3.38
<i>Döbeln</i>			
Helpers over 20 years .....	160	38.13	3.00
Head workers .....	180	42.89	3.38
<i>Magdeburg</i>			
Journeyman, 20-24 years .....	215	51.23	4.04
Older journeymen and those in wholesale trade work .....	240	57.19	4.51
<i>Hamburg, Altona and Wandsbeck</i>			
Journeyman over 20 years .....	300	71.49	5.63
Women .....	155	36.94	2.91
<i>Königsberg, Prussia</i>			
Helpers, 1st year after apprenticeship	180	42.89	3.38
Advance helpers .....	204	48.61	3.83
Responsible helpers and journeymen over 26 years .....	250	59.58	70

<sup>1</sup>*Reichs-Arbeitsblatt*, p. 145.\*

## ADDENDUM

The following figures on wages in Switzerland at the end of the year 1920 were made available to the National Industrial Conference Board after the report had gone to press, and have therefore been incorporated as an addendum. These data are considered of interest and are included in view of the important industrial position occupied by Switzerland.

### WAGES IN VARIOUS INDUSTRIES IN SWITZERLAND AT THE END OF 1920

	Francs	Dollars <sup>1</sup>	
		Par of Exchange	Exchange 1920-21
Machine industry			
Skilled workers .....	1.90	.366	.319
Unskilled workers .....	1.60	.308	.268
Textile industry			
Men .....	.81 to 1.84	.156 to .355	.136 to .309
Women .....	.74 " 1.08	.142 " .208	.124 " .181
Silk industry			
Men and women .....	1.15	.221	.193
Silk subsidiary industries			
Men .....	1.65	.318	.277
Women .....	1.00	.193	.168
Watch making industry....	1.50 to 1.68	.289 to .321	.252 to .282
Chemical industry .....	1.64	.316	.275
Paper industry .....	1.30 to 1.72	.251 to .331	.218 to .289
Boot and shoe industry			
Skilled workers .....	1.60	.309	.269

<sup>1</sup>Par of exchange, 1 franc = \$.193. The average exchange April 1, 1920 to April 1, 1921 was the second conversion basis for rest of the report and has been also used in this section. There has been very little fluctuation in Swiss francs, and this figure (1 franc = \$.168) is fairly representative of exchange as of the end of 1920 as well as of the present time.

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